

https://dspace.org/

AI Integration in Global and African Universities: Comparative Lessons for Research Ecosystem Transformation

Matizirofa, Lazarus Gallant

2026-11
University of the Witwatersrand, Johannesburg
https://hdl.handle.net/10539/50315
Matizirofa, L.G. (2026). AI Integration in Global and African Universities: Comparative Lessons for Research Ecosystem Transformation. [Presentation, University of the Witwatersrand, Johannesburg]. WIReDSpace. https://hdl.handle.net/10539/50315

Downloaded from a DSpace repository. https://dspace.org/

UNIVERSITY OF THE WITWATERSRAND, JOHANNESBURG

TANZANIA INSTITUTE OF ACCOUNTANCY
TIA
"Education for Efficiency"

AI Integration in Global and African Universities:

Comparative Lessons for Research Ecosystem Transformation

Main theme: Competitive and Sustainable Economic Transformation for Resilient Global Economies
5th International Conference on Business Management and Economic Development (ICBMED), 10-11 November 2026

Wits' AI policy, faculty approaches, and strategic choices

The State Of AI In Research 2026

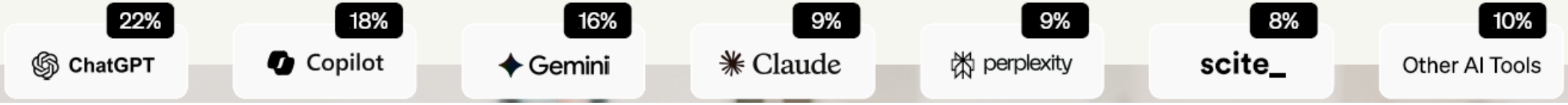
UNIVERSITY OF THE WITWATERSRAND, JOHANNESBURG

Where AI Is Showing Up In Research

The primary tasks for which AI is currently used or planned for use in the next six months are distributed as follows:

17%	17%	17%	11%	10%	10%
Information discovery	Research and knowledge work	Writing, content creation, and summarization	Data analysis and business intelligence	Administrative tasks and process automation	Training, education, or skill development

Which tools are currently in use?



Source: Research Solutions, 2026

Wits University | Where Knowledge Shapes the Future





Wits University: Research and Innovation Driving Global Impact



AI integration is an institutional transformation agenda

UNIVERSITY OF THE WITWATERSRAND, JOHANNESBURG

Academic quality

Human judgement and credible evidence remain central to teaching and research.

Organisational capability

Faculty expertise needs shared infrastructure, support and accountable leadership.

Public value

African priorities should shape research questions, partnerships and benefits.

AI integration is the anchor of teaching, learning, and research

UNIVERSITY OF THE WITWATERSRAND JOHANNESBURG

UNIVERSITY OF THE WITWATERSRAND JOHANNESBURG

WITS AI POLICY

ARTIFICIAL INTELLIGENCE (AI) WILL NOT DEFINE US. INTEGRITY WILL.



Wits is committed to the responsible use of AI through the following six principles:

1. Uphold personal integrity and accountability
2. Foster and enable AI literacy
3. Adapt research, pedagogical and assessment practices
4. Prioritise human oversight and augmentative use
5. Manage institutional risks and promote responsible implementation
6. Equitable, inclusive, and socially just AI practices

visit www.wits.ac.za/ai-policies/ to view and download the following documents:

- **Wits Artificial Intelligence (AI) Policy**
- **Six Wits AI Principles**
- **Faculty-specific AI principles and policy documents**

Wits. For Good

Teaching, research and innovation form one ecosystem

UNIVERSITY OF THE WITWATERSRAND, JOHANNESBURG

Teaching and learning

AI literacy builds the foundations for advanced inquiry and professional practice.

Research

Responsible assistance can support discovery while preserving intellectual ownership.

Innovation

Interdisciplinary teams translate research into applications and societal benefit.

Wits Innovation Centre



TSHIMOLOGONG
WITS UNIVERSITY

Comparative lessons require attention to context

UNIVERSITY OF THE WITWATERSRAND, JOHANNESBURG

Global comparators

Oxford: research governance

Arizona State: supported experimentation

African comparators

UCT: teaching innovation funding

CMU-Africa/Afretec: collaborative research

Wits anchor case

University principles

Faculty guidance

AI research and innovation entities











, Afretec and Wits

Wits links AI use to its academic strategy

UNIVERSITY OF THE WITWATERSRAND, JOHANNESBURG

Institution-wide scope

The policy covers staff and students across research, innovation and education.

Strategic alignment

Research and postgraduate plans connect with the 2025–2029 learning and teaching plan.

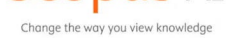
Faculty interpretation

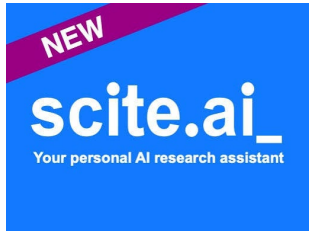
Disciplinary guidance translates common expectations into local academic decisions.













Source: Wits AI policy portal

Six Wits principles define responsible integration

Principle, paraphrased	Strategic implication
Integrity and accountability	People retain responsibility and disclose AI use.
AI literacy	Staff and students evaluate capabilities and limits.
Adapted academic practices	Research and assessment evolve with AI.
Human oversight	Scholars retain final judgement.
Institutional risk management	Privacy, security and intellectual property matter.
Equity and social justice	Access and representation shape implementation.









Source: Wits AI policy portal

Faculty adoption needs discipline-specific rules

UNIVERSITY OF THE WITWATERSRAND, JOHANNESBURG

Shared institutional core

Academic integrity, ethical practice and accountability establish common expectations.

Faculty application

Rules reflect different evidence standards, professional obligations and learning outcomes.



Course and project decisions

Explicit permissions help students and researchers understand appropriate assistance.

Source: Wits faculty guidance, especially FEBE (2026)

Commerce, Law and Management builds a guidance suite

Teaching and learning

Staff guidance helps lecturers consider generative AI within educational practice.

Assessment and students

Companion resources address assessment, prompting and student responsibilities.



Research integrity

Researcher guidance distinguishes assistance from outsourcing scholarly thought.

Sources: Wits CLM guidelines, September 2024

Engineering makes permissions explicit at course level

RED

AI use is prohibited for specified independent tasks.

YELLOW

Default restricted status. The course brief must expressly permit task use.

GREEN

AI use is encouraged within defined requirements and verification protocols.



Source: FEBE generative AI guidelines, February 2026

Health Sciences connects assistance with student responsibility

Learning support

Guidance recognises AI assistance while warning against excessive dependence.

Research supervision

Postgraduates should discuss permitted uses with supervisors and disclose involvement.

Data protection

The guide directs students toward institution-approved provision and cautions against sensitive uploads.

Source: Health Sciences student AI guide, 21 October 2025

Humanities and Science broaden the academic response

Humanities

Teaching support combines staff development, course redesign and AI guidance resources.

Science

The Wits portal publishes student guidance on responsible AI learning.

Cross-faculty learning

Health Sciences' adaptation of Science guidance illustrates reusable institutional knowledge.



Sources: Wits Humanities support, AI portal and Health Sciences guide

Teaching and learning can strengthen research readiness

Critical AI literacy

Students compare model outputs with disciplinary evidence and local context.

Visible reasoning

Assessment can reveal how students justify choices, check claims and revise work.

Research preparation

Supervised practice can develop source evaluation and transparent methods.



Research assistance needs a clear human responsibility boundary

Research activity	Potential assistance	Human responsibility
Literature discovery	Search terms and candidate leads	Read sources and validate coverage
Methods and code	Explanations and debugging	Own the design and test the code
Writing	Language editing and critique	Retain argument and authorship
Interpretation	Alternative questions to examine	Derive and defend conclusions

Source: CLM researcher guidance, with proposed applications

Postgraduate supervision needs an explicit AI agreement

At project approval

Agree permitted uses, data boundaries and disclosure requirements.

During supervision

Discuss AI interactions alongside drafts, evidence and analytical decisions.



At submission

Check declarations, sources and the candidate's ability to defend the contribution.

Wits has assets for interdisciplinary AI research

Fundamental AI

RAIL, ExplainableAI and PRIME provide complementary research capabilities.

Cross-disciplinary inquiry

MIND connects natural and artificial intelligence with interdisciplinary teams.

Applied problem solving

The Wits ecosystem includes fintech, digital governance and health-related applications.

Source: Wits MIND, AI at Wits

Innovation depends on connections beyond the laboratory

UNIVERSITY OF THE WITWATERSRAND, JOHANNESBURG

Research capability

MIND supports scientific inquiry and advanced technology innovation.

Translation support

The Wits Innovation Centre coordinates innovation activities across the university.

External partnership

Industry links can support incubation, commercialisation and real-world testing.





Wits Innovation Centre

Source: Wits MIND, AI at Wits

Global comparators show complementary operating choices

Case	Published mechanism	Transferable lesson
Oxford	GenAI research policy and supporting guidance	Align responsible use with research governance.
Arizona State	AI Innovation Challenge and supported platform access	Give academic teams a structured route to experiment.

Sources: Oxford research policy and ASU AI Innovation Challenge

African comparators emphasise investment and collaboration around AI projects

Case	Published mechanism	Transferable lesson
UCT	2025 teaching AI grants proposed up to R120,000 each	Fund faculty experimentation and evaluation.
CMU-Africa / Afretec	Multi-institutional research, including low-resource languages	Pool expertise around African research needs.

Sources: UCT CILT and Afretec knowledge creation

Comparative lessons support a federated university model

Common standards

Oxford and Wits illustrate the role of institutional guidance.

Funded academic initiative

ASU and UCT illustrate structured support for faculty experimentation.

Shared research capability

Wits and Afretec illustrate interdisciplinary and inter-institutional connections.

African priorities should shape the investment portfolio

UNIVERSITY OF THE WITWATERSRAND, JOHANNESBURG

Access and continuity

Affordable provision, accessible interfaces and low-bandwidth options.

Language and knowledge

Local-language evaluation and respect for community knowledge rights.

Institutional autonomy

Portable data, sustainable costs and fair partnership agreements.

A proposed governance model connects authority with delivery

Accountable body	Core decision	Delivery partners
Executive and Senate	Strategy, standards and institutional risk	Research and education leadership
Faculty leadership	Disciplinary permissions and pilot portfolios	Course leads and supervisors
Shared service team	Approved tools, data controls and support	IT, library, ethics and research office
Project owners	Evidence of benefits and responsible practice	Students, researchers and communities

Investment should follow academic value and readiness

UNIVERSITY OF THE WITWATERSRAND, JOHANNESBURG

Near-term pilots

Verified literature discovery support

Staff AI literacy

Course feedback assistance

Selective development

Secure research coding support

Multilingual resources

Disciplinary evaluation datasets

Longer-term commitments

Shared computing capacity

Local model capability

Sustained industry and public partnerships

A phased roadmap makes transformation reviewable

Period	Main work	Decision gate
0–3 months	Map use, access, risks and priority problems	Approve standards, owners and pilot criteria
4–9 months	Train teams and run bounded pilots	Review quality, access and cost evidence
10–18 months	Scale successful uses and integrate support	Renew, modify or stop each investment

Success measures combine quality, capacity and equity

Outcome	Illustrative measure	Evidence owner
Research integrity	Verified sources and complete AI disclosures	Research office / supervisors
Research capability	Competence gains and reproducible workflows	Faculty project leads
Learning quality	Independent performance and feedback quality	Teaching and learning teams
Equitable access	Participation and outcomes across user groups	Institutional planning
Sustainable value	Time saved after verification and support costs	Finance and project owners

Strategic choices for university leadership

UNIVERSITY OF THE WITWATERSRAND, JOHANNESBURG

Credible research and wider participation should define the purpose of AI integration

1. A common policy with faculty ownership
2. Supported experimentation with evidence of value
3. Shared capability focused on African priorities

Selected sources: Wits AI policy and faculty guidance • Wits MIND
Oxford research policy • ASU AI Innovation Challenge • UCT CILT • Afretec

CC BY NC SA



WITS UNIVERSITY

Lazarus Gallant Matizirofa

Associate Director
Research, Scholarly Communications,
Digital Systems & Services
Wits Libraries

LET, 4th Floor
The Wartenweiler Library, Braamfontein Campus East
University of the Witwatersrand, Johannesburg
Phone: +27(0) 11 717-71903
E-mail: lazarus.matizirofa@wits.ac.za
Website: www.wits.ac.za

ORCID: 0000-0002-0021-2738

ORCID *Global Participation Fund Grantee, 2026*