UNIVERSITY OF CAPE TOWN
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UCT Framework for Artificial Intelligence in Education: Generative and Other AI in Teaching, Learning and Assessment

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UCT's Compass for Navigating AI in Education

Focus

- Provide guidance on the responsible and effective use of AI in education at UCT
- Promote AI literacies and ethical use among students and staff
- Ensure the integrity of teaching, learning, and assessment in an AI-mediated environment
- Promote reviewing curricula that accommodates AI technologies appropriate to the discipline
- Consider the potential of AI technologies to support innovation in teaching and learning

Three Pillars for AI Engagement

1. Promoting **AI literacies** for staff and students
2. Promoting and ensuring **assessment integrity**
3. Exploring and investing **in AI-enabled opportunities for innovation** in teaching, learning and curriculum design

These pillars have been developed from ongoing campus engagements as well as drawing on emerging practices of universities in the sector and globally. Together these pillars seek to address both risks and opportunities by providing a roadmap for responsible engagement and adoption of AI tools appropriate to UCT's teaching and learning mission and imperatives.

Principles for AI in Education at UCT

- Supporting the **ethical and responsible use** of AI to support teaching and learning
- Fostering **critical AI literacies** as a key competency for students and staff
- Maintaining a **human-centred approach** to education
- Ensuring **equity and accessibility** in AI use
- Balancing **innovation with responsible implementation**
- Supporting **continuous learning and agility** to adapt to AI advancements

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Purpose and Rationale

Purpose

The UCT AI in Education Framework offers guidance for the responsible and ethical use of artificial intelligence (AI) in teaching, learning, and assessment.

Scope

AI is a large and loosely defined domain area. This framework is concerned with 'narrow' AI, as this is the type of AI currently available. There are other theoretical varieties of AI which may come to be in the future; this framework focuses on the currently available capabilities.

Artificial intelligence (AI) refers to "a range of technologies that perform cognitive tasks, through machine learning, natural language processing, data mining, neural networks or an algorithm" (Zawacki-Richter et al., 2019).

AI is an expansive term that encompasses a wide range of methodologies and applications, from computer vision to predictive analytics to machine learning and robotics.

The field of Artificial Intelligence (AI) has been evolving as a field for decades. But it has been the recent developments in *generative AI* that have moved it from the realm of computer science specialist applications into everyday use.

Generative artificial intelligence (generative AI) describes technologies such as ChatGPT, Claude or Dall-E trained to create new content, including text, audio, code, images, simulations, and videos. Universities globally have been engaging with and responding to the widespread prevalence and adoption of AI tools by both students and staff since 2023.

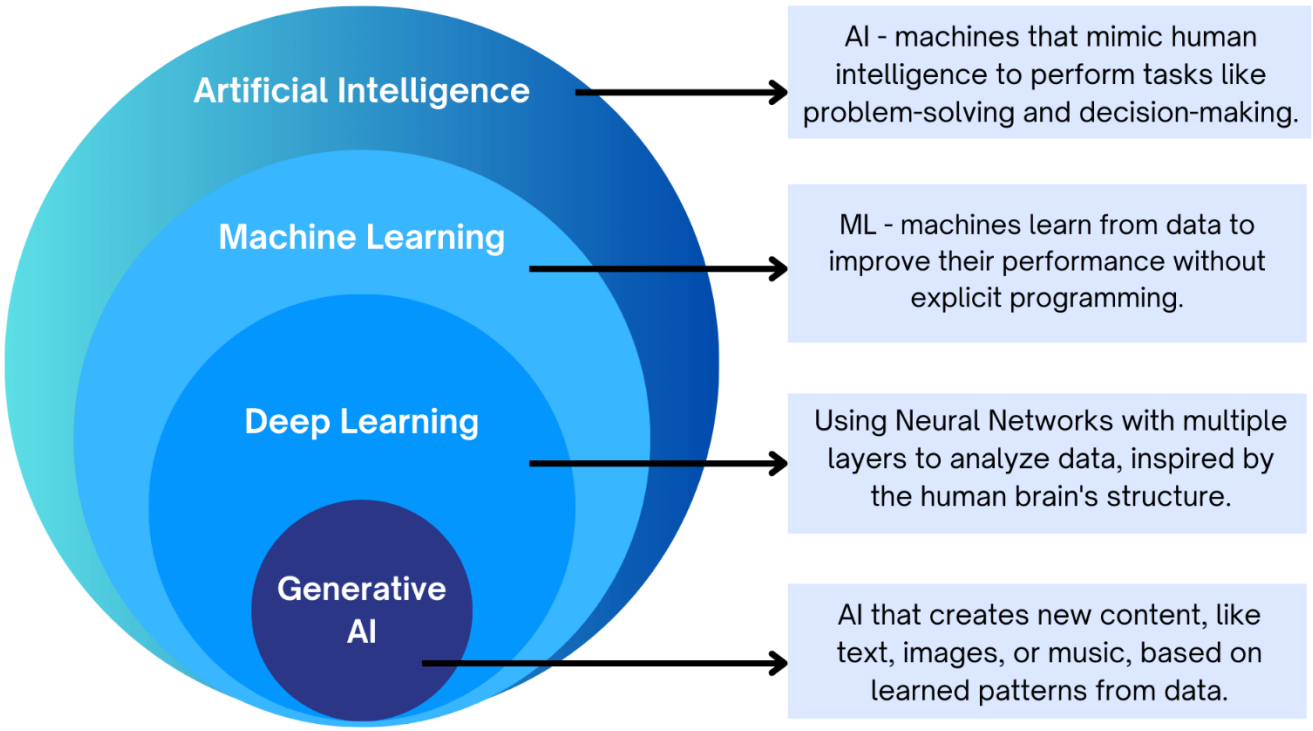

Figure 1 Generative AI as a field within Artificial Intelligence (SAP, 2024 available via the UCT AILibGuide)

AI technologies are opening possibilities for interacting with and even producing knowledge. With generative AI's capacity to generate text, images, video, audio and code such tools offer academics, staff, and students the ability to brainstorm ideas, develop learning materials, and build resources or even create complete works (Paskevicius, 2024).

The framework's title retains the expansive use of 'AI' (i.e. UCT framework for AI in education), but there is more focus on Generative AI because of the disruptive aspects for traditional teaching and learning. AI will be used in this framework document to be inclusive of Generative AI, unless there is a need to specify generative AI. This may need to be revised as the field develops.

Rationale

As a "dual purpose" set of technologies, AI can both expand students' potential and simultaneously undermine teaching pedagogies and the integrity of assessment practices. This framework aims to support informed and intentional decision making about how AI is used in teaching and learning and how to support and shape other UCT institutional imperatives including assessment redesign and curriculum change initiatives across the university.

UCT has taken steps to address the impact of AI by providing a range of resources including guides for both students and staff, as well as offering custom workshops, presentations, and podcasts to facilitate engagement with AI tools. Different departments and faculties have tailored their responses to suit the needs of their respective disciplines. Currently, there are numerous AI-related activities, resources, and guides available across the university, but many of these initiatives are happening in pockets, requiring coordination and centralised communication.

In reviewing developments against the AI Maturity model for Education (JISC), UCT is now moving from the Experimenting and Exploring phase into an Operational phase and this requires the development of clear institutional principles and more systematic approaches.

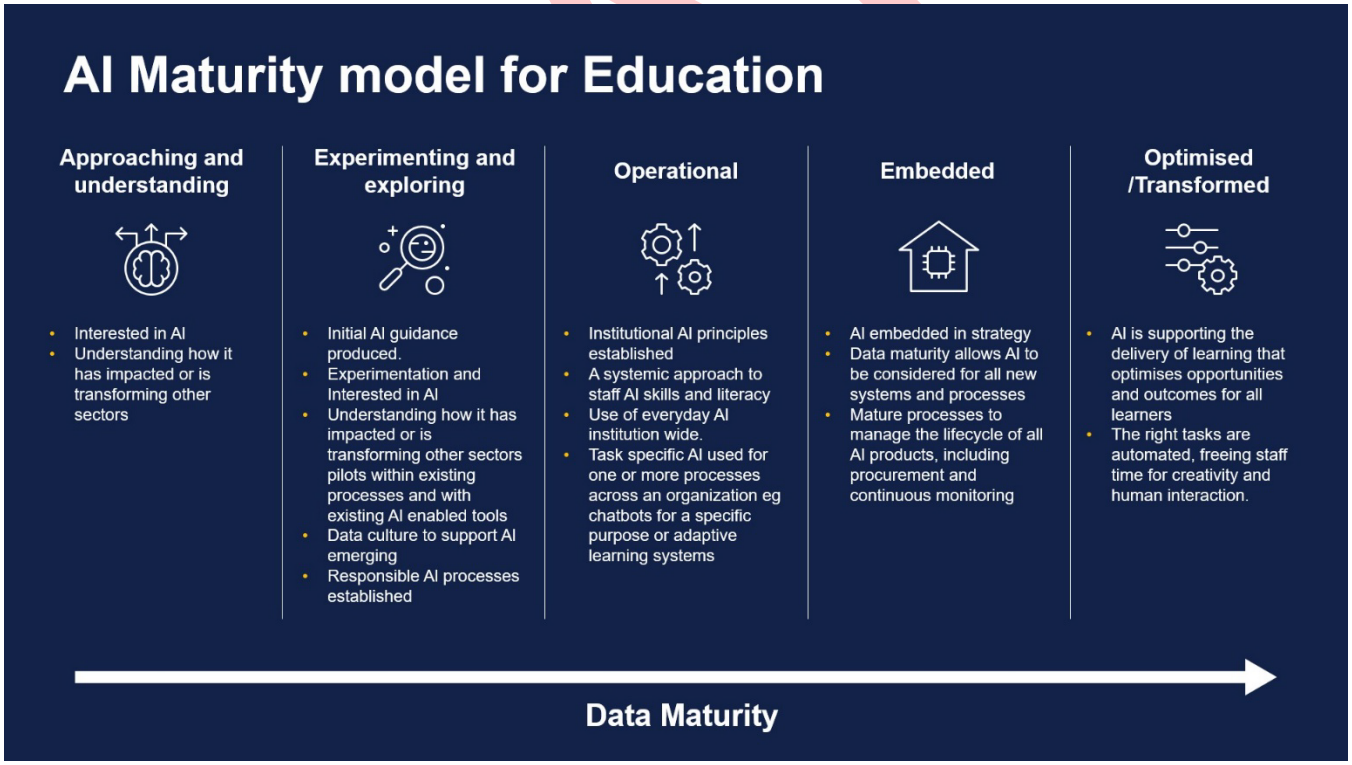

Figure 2 AI maturity model for education (Webb, 2024)

Alongside the communication of principles that frame UCT's approach to AI in education, this proposed framework offers an opportunity to review and investigate existing AI activities and resources, curating them into a more accessible and organised format.

The focus of this framework is:

- to provide guidance on the responsible and effective use of AI in education at UCT;
- to promote AI literacies and ethical use among students and staff;
- to ensure the integrity of teaching, learning, and assessment in an AI-mediated environment;
- to promote reviewing curricula that accommodates AI technologies appropriate to the discipline; and
- to consider the potential of AI technologies to support innovation in teaching and learning.

It also sets out general principles to guide ongoing decision-making and offers practical guidance with links to relevant resources and services, both current and in development.

The framework does not:

- address administrative workflows; however, those involved in teaching, learning, or student support may find it useful where applicable to their educational roles;
- provide academic research guidance;
- address research in the broader spectrum of AI technologies and methodologies, such as machine learning, predictive analytics, robotics, computer vision, natural language processing beyond content generation, or autonomous systems; or
- address advancing interdisciplinary AI initiatives or managing AI-related funding strategies across the university.

The rapid advancement of AI presents ongoing challenges for institutional policy development, as the pace of technological innovation often outstrips the ability of regulatory frameworks to adapt. In response, this framework draws on UCT's AI in Teaching and Learning Guides, which will continue to serve as dynamic, continuously updated references for both teaching staff and students. The guides serve to inform and support faculties and departments who are best placed to develop the most appropriate approaches for their disciplines in response to these developments.

This framework has received input from several university stakeholder groups. The Online Education Sub-Committee's (OESC) AI in Education Working Group has solicited feedback from the UCT community on what is happening across the university and what needs to be prioritised, as well as what is happening at universities elsewhere. The concerns reflect those raised elsewhere, such as the need to develop AI literacies and to address concerns about academic integrity. Other UCT specific challenges include how to integrate UCT's new assessment policy that responds to Generative AI's impact and to consider practicalities such as the extra workload on lecturers to investigate the unethical use of AI and to redesign assessments.

The framework also addresses the risks of overemphasising AI-related assessment misconduct. Neither ignoring nor banning AI at universities is a feasible option. AI detection is unreliable, and the use of AI enabled detection tools poses risks to the university as well as to students. UCT encourages a more

pragmatic and realistic approach, acknowledging the evolving nature of AI tools as heralding changes in practices including what is taught and how it is taught and assessed.

This framework aligns with Vision 2030 in relation to emphasising ethical use, equity, and social justice principles in promoting responsible AI use in teaching and learning. UCT is committed to making AI tools accessible and inclusive for all students, regardless of their background, and will continue to explore AI innovations to lead and shape a future where AI is likely to be ubiquitous.

This framework also acknowledges the ongoing work and mandates of the UCT AI Initiative and the AI Research Unit (AIRU) which have distinct focus areas that sit outside the scope of this framework, but their work may intersect with teaching and learning. Key role players from these entities have given input into the development of this framework.

The UCT AI Initiative

An initiative is underway to establish a new AI Institute. The Institute will serve as a hub for applied AI research in key areas such as Health and Wellbeing, Climate and the Environment, and Poverty and Inequality, building on the University's existing strengths in these domains. It will also support foundational work in AI and AI safety, ensuring a robust and responsible approach to the development of emerging technologies.

Alongside its research agenda, the Institute will focus on capacity building and equipping students and staff with the skills needed to engage with and deploy AI tools responsibly. This will help develop a new generation of African leaders who can harness AI's potential for social good.

A key component of the Institute's vision is knowledge translation: turning academic research into real-world solutions, products, and services that meet the needs of communities across the continent. Through this work, the Institute aims to position UCT as a leading force in responsible, inclusive AI innovation in Africa.

The UCT AI Research Unit

The mission of the Artificial Intelligence Research Unit (AIRU) is to provide research and thought leadership to academia, industry, government and civil society, so that they can leverage AI to improve people's lives. AIRU is based in the Department of Computer Science in the Faculty of Science at the University of Cape Town and is led by Professor Tommie Meyer and Professor Deshen Moodley. The unit harnesses blue sky AI approaches to explore innovative applications of artificial intelligence to advance Africa.

As hosts of South Africa's national AI network, the Centre for AI Research (CAIR), AIRU has strong local and international networks and affiliations. As the Department of Science and Innovation's flagship programme for AI, CAIR is a key instrument for building South Africa's foundational capacity for AI research in alignment with the government's strategy over the next 10 years.

Principles for AI in Education at UCT

In relation to Vision 2030, drawing on existing principles in related policies, and the deliberations of the AI in Education working group of the OESC, this framework proposes the following principles:

- UCT is committed to supporting the **ethical and responsible use** of AI to support teaching and learning;
- UCT is committed to fostering **critical AI literacies** as a key competency for students and staff;
- UCT is committed to maintaining **a human-centred approach** to education;
- UCT is committed to ensuring **equity and accessibility** in AI use;
- UCT is committed to balancing **innovation with responsible implementation**; and
- UCT is committed to supporting **continuous learning and agility** to adapt to AI advancements.

Three Pillars for AI Engagement

To operationalise the principles for AI in Education at UCT, the framework promotes three organising themes which we call **pillars**. These pillars have been developed from ongoing campus engagements as well as drawing on emerging practices at universities in the sector and globally:

1. Promoting **AI literacies** for staff and students
2. Promoting and ensuring **assessment integrity**
3. Exploring and investing in **AI-enabled opportunities for innovation** in teaching, learning and curriculum design.

Together these pillars seek to address both risks and opportunities by providing a **roadmap** for responsible engagement and adoption of AI tools appropriate to UCT's teaching and learning mission and imperatives.

While the pillars stand alongside each other, there are clear dependencies. AI literacies are required for staff and students to better understand the possibilities for both assessment integrity and AI-enabled innovations. Promoting assessment integrity will require the investigation of AI-enabled innovations to support future assessment practices.

1. Promoting AI Literacies and Capabilities for Staff and Students

An immediate need exists for developing and strengthening AI literacies among staff and students (Paskevicius, 2024). There is now a consensus that banning generative AI use from all educational contexts is unrealistic, while uncritically permitting all forms of AI is a shortsighted strategy which poses risks to the development of academic competencies where students may be offloading learning activities by overly relying on AI.

AI literacies involve sound knowledge about the basic functions of AI, ability to ethically apply AI knowledge, concepts and applications in different scenarios and ability to critically evaluate AI technologies, communicate and collaborate effectively with AI (Ng et al., 2021). Universities worldwide are recognising the importance of equipping graduates for the requirements of the workplace, which will to an increasing extent require sophisticated capacities to work with AI tools (see for example: Southworth et al, 2023; Cerny, 2024). Essentially AI literacies emphasises understanding "how to communicate effectively and collaboratively with generative AI technologies, as well as evaluate the trustworthiness of the results obtained" (Pretorius, 2023).

This develops understanding of what AI can be used for, what it does not do well, and how to acknowledge its use. These definitions capture both intended uses and potential misuses that go beyond mere functional skills (Bali, 2024). AI literacies require cultivating critical thinkers who can use AI effectively and ethically, while being aware of its broader societal implications.

Beyond general AI literacies, there is a need to understand how AI impacts disciplinary practices. Capacity development will need to consider both the opportunities and challenges generative AI presents for expanding learning in fields and disciplines. AI literacies need to provide practical opportunities for staff and students to learn appropriate use of different tools for their disciplinary context while also developing an awareness of the wider societal value and risks, and the capacity to critically evaluate any outputs.

Existing academic literacies development at UCT located in the Libraries, faculty orientation programmes, writing centres and research support services will need engagement and targeted interventions to incorporate specialised AI literacies capacity development where appropriate.

Drawing on experiences at UCT, the growing body of literature (Ng et al., 2021; Walter, 2024; Bali, 2024; Jisc, 2024) and emerging practices at universities (for example: University of Johannesburg; University of Florida; University of Sydney; Oregon State University; Monash University) an AI literacies framing for UCT will focus on five topics covering knowledge, skills and dispositions, foregrounding the promotion of critical thinking and human-centred engagement with AI tools.

Figure 3 Framework for AI literacies at UCT (CILT 2024, adapted from Bali 2024)

1. **Understand how it works**
   Provide explanations of some of the key concepts and underpinning technologies in AI including machine learning and large language models to develop an understanding of AI functionality for a non-specialist audience (i.e., no prior knowledge of computer science is assumed).

2. **Examine ethical issues**
   Introduce and explore the current and emerging ethical challenges within the field of AI to equip staff and students with the knowledge and tools to make ethical choices about the use and applications of AI. This includes questions about privacy and data protection; practices around citation and acknowledging use of AI tools; environmental and social impacts; the risks of algorithmic bias, digital inequalities and exploitative AI labour practices.

3. **Adopt a just approach**
   Encourage critical reflection on the integration of AI in higher education with a focus on promoting participation, justice and care, and recognising that no technology is neutral. Introduce frameworks that encourage thoughtful and meaningful use of AI for teaching, learning, and administrative practices.

4. **Assess appropriate use**
   Introduce various applications and types of tools with an emphasis on comparing and evaluating their capabilities and limitations for different tasks and applications.

5. **Engage critically**
   Teach effective AI tool usage through hands-on practice. Focus on prompt engineering, parameter setting, and output evaluation.

While a common AI Literacies framework will be adopted, the materials will include a range of examples and different contexts aimed at specific interest groups, such as teaching staff, support staff and students.

Guidance and Support

An AI Literacies framework and targeted learning materials and courses will help develop staff and students' foundational skills, but the success of this will depend on take-up. Mechanisms for making AI literacies training mandatory for students need to be established, requiring high level executive commitment and appropriate governance structures. Staff will also need to be incentivised to undertake AI literacies capacity building as part of their own development as teachers and educational professionals.

Departments and teaching staff will also need to offer discipline specific guidance and support systems that help students navigate these technologies ethically and effectively. This could involve providing workshops, resources, or tutorials on responsible AI use to support learning.

Promoting a culture for responsible AI use will require opportunities for student questions and feedback regarding AI use. Departments can explore multiple ways of soliciting student input and feedback, which include adding questions to pre-course surveys or course evaluations, classroom discussions, polls or tutorial topics. Involving students in co-creating guidelines for the use of AI tools in courses allows for a continuous dialogue which models a human-centred approach to working with AI tools and helps maintain a positive learning environment where academic integrity is respected, and students feel supported in their educational journey. Generative AI also offers more efficient accessibility features or accommodations for students with disabilities, such as enhanced voice-to-text capabilities.

Roadmap to support AI Literacies pillar

What is already in place

- CILT AI guides for staff, students, and researchers
- An AI Literacies Interactive guide for staff – Self paced learning on Amathuba

- An AI Literacies Interactive guide for students – Self paced learning on Amathuba
- Customised workshops on request to CILT
- UCT Libraries: AI LibGuide
- UCT libraries workshops.

Medium and Long-term

- Mechanism for mandatory AI Literacies training for students to be established
- Faculties and departments to adapt AI literacies resources to make them relevant to specific disciplinary contexts;
- AI literacies resources updated to respond to changing landscape;
- Centralised AI hub for all UCT AI activities, workshops, and presentations
- Research and monitoring of uptake and skills development of AI literacies resources
- Integration of AI literacies training with existing digital literacies training and academic integrity and ethics training.

2. Promoting and Ensuring Assessment Integrity

Concerns about academic integrity, assessment practices, and students subverting learning tasks have grown in parallel to the increasing availability and capabilities of AI tools. Many traditional student assessment artefacts such as essays, projects, and reports, long used as proxies for learning, can now be produced in part or in full by generative AI (with increasing sophistication). This simultaneously undermines the desirable learning effects of assessment and challenges the validity of decisions based on existing assessment practices.

Challenges to be faced range from the immediate, such as managing assessment in large classes and understanding the limitations of AI detectors, to the medium-term, such as rethinking learning outcomes and the aligned redesign of assessment. There is also a need, however, to transition rapidly from isolated redesign of single assessments to a more curriculum-based response: “Reactive and localised responses risk privileging [generative] AI capabilities over educational intent, leading to tool-distorted rather than purpose-driven assessment design” (CIlliers, Walji et al, 2025).

Assessment integrity is governed by the UCT Policy for the Prevention and Management of Academic Misconduct by Students (Senate, December 2023). This expects students to “always be able to defend the truthfulness and accuracy of the work they present as their own without the aid of technologies, materials or collaboration not allowed for the assignment”. Cheating to gain an unfair advantage is considered misconduct and the use of generative AI to complete an assessment is an example alongside contract cheating, where a person pays someone else to do the work. The UCT policy does permit students to use “software that detects and corrects spelling and grammatical errors”. AI use would also be permitted if this were explicitly stated in the assessment instructions.

Guidance and Support

The UCT Assessment Policy (adopted in 2024) provides a framework to enable the conditions for redesigning assessments. This policy recognises assessment as an integral component of the curriculum and a means to project what we value. The Digital and Online Education Policy for UCT (adopted in 2024) promotes greater flexibility, accessibility and resilience through digital technologies, including assessment design. There is a need to develop guides and frameworks to support assessments redesigns, ranging from short-term to longer term responses (some examples draw from Kings College London).

Enhancing assessment integrity is a multipronged endeavour. Staff and students need to bring critical AI literacies to bear (Pillar 1). The degree to which AI could, should and should not be used in assessments needs to be accommodated in assessment design, as should the potential for differential access to tools to affect student performance where AI tools are incorporated in assessment design. Staff need to make acceptable use of and limitations on the use of AI clear to students. Students need to appreciate the affordances and risks (to learning; to competence; to integrity) of using AI in assessment. Processes to decide whether there might have been and responding to unacceptable use of AI need to be specified.

Design choices and transparency. While reverting to invigilated in-person assessments is an assessment design choice that can eliminate the possibility of unauthorised AI usage, this will not always be desirable without sacrificing meaningful assessment goals and assessment validity. AI tools can offer valuable support for students' learning and assessment, but they should not replace foundational academic skills. Teaching staff have a responsibility to help students understand why independent learning, critical thinking, and the ability to complete assessments without over-reliance on AI are essential for both academic success and personal development In line with global trends, it is likely that there will be assessments in a course or programme which now need to be invigilated and/or observable to ensure the development of foundational skills, and these will form part of a broader assessment protocol for a given course or qualification.

In instances where AI is permitted, educators should specify which tools are acceptable and provide guidelines on how to acknowledge these. Teaching staff need to be aware of the risks of increasing inequality between students because of the cost of access to advanced AI tools which currently offer more capabilities than the basic offerings available as part of UCT's Microsoft subscription. UCT is yet to establish a set of licenced AI tools based on teaching and learning requirements (see Pillar 3). Requiring students to declare whether they have used AI tools in their assignments helps ensure transparency and accountability. Additionally, students should be encouraged to justify and defend the accuracy and authenticity of their work, that may include keeping a record or portfolio of use that they can be asked to share, particularly when AI has been involved. For transparency, educators should indicate to students' instances where AI or automated tools are used for marking or assessment.

Clear communication. Many departments and courses have developed guidelines responding to AI and specific to their discipline and learning outcomes. Some have not permitted the use of generative AI while others have required a declaration of use as part of a plagiarism declaration. In other cases, students may use generative AI tools or require explanations justifying the appropriate use. Teaching staff should define

when and how generative AI tools can be used in academic work. It is crucial that assessment tasks provide clear instructions on appropriate and inappropriate AI use, while ensuring that students are aware of the reasons (see examples Student AI Declarations). Students – who may be taking courses across different faculties – need to understand these boundaries to avoid unintentionally violating the academic integrity expectations specific to the faculty, department, or course concerned.

Responding to unacceptable AI use. AI detection tools including the one available in Turnitin have been found to be unreliable in university contexts, often producing false positives or negatives or easily being subverted. Unlike traditional plagiarism checkers, AI detection tools rely on statistical methods to estimate the likelihood that a piece of text was generated by AI. This can lead to wrongful accusations of academic misconduct, damaging trust between lecturers and students, and creating an adversarial learning environment. At UCT, AI-detection scores should not form part of an academic misconduct case (Senate Teaching and Learning Committee, November 2024).

In line with global higher education trends, UCT acknowledges that assessment practices are being and will continue to need to be adapted in the short term to ensure assessment integrity and validity. Drawing on guidance from the Australian Tertiary Education Quality Standards Agency, this framework concurs that:

- **Forming trustworthy judgements about student learning requires multiple, inclusive, and contextualised approaches to assessment.**
  Existing assessment types may no longer be suitable on their own. This will require the use of multiple assessments of different types that, when used together (as part of programmatic assessment design), provide greater trustworthiness and allow for practices that are more inclusive.

- **Assessment and learning experiences equip students to participate ethically and actively in a society where AI is ubiquitous.**
  New questions are being raised about what is worth assessing and, consequently, what and how students learn. Students will need to develop the ability to use AI tools while developing understandings of the ethics, limitations, biases, and implications of AI. Responding to academic integrity concerns will require incorporating generative AI technologies in a thoughtful and evidence-informed manner. Responding to the risk posed by generative AI needs to focus not only on what is inappropriate but also on what is appropriate.

In the short-term existing assessments need to be adapted to ensure security and validity, which may include more in-person assessments, a focus on programmatic rather than course-level assessment, and strategies to assess the process as well as the products of assessment. In the longer term, significant assessment redesign work will be required to adequately respond to the pervasiveness of generative AI. This will require a review and reconceptualisation of learning outcomes at course and programme level. UCT acknowledges that assessment review and redesign will create additional workload for staff and tutors. This will need to be considered when planning departmental workload allocation and scheduling

and acknowledged in performance appraisal. The university will need to provide additional support to facilitate assessment reviews, redesigns, and assessment administration.

Roadmap to support academic integrity pillar

What is already in place

Initiatives to support changing assessment practices to respond to AI include:

- Assessment Studio – offered by CILT;
- Staff and student guides on AI for teaching and learning – developed by CILT;
- Good Practices for Assessment Guide with exemplar case studies;
- Assessment redesign for AI: an interactive guide – self paced resource on Amathuba;
- Consultations offered by CILT and through the Assessment Framework Working Group on request for departments and individuals (email: CILT Helpdesk); and
- UCDG Project 4; Sub-project AI and Assessment Literacy to support AI in assessment literacy and practices to enhance assessment (2024-2026).
- Communication from the DVC Teaching and Learning to Deans about the limitations of the use of AI detectors

What is required (Short-term)

- The Assessment Framework Working Group (AFWG) to take forward the development of this pillar in line with its role to support the implementation of UCT's Assessment policy with AI responsive assessment design as integral goal;
- Encourage the use of multiple assessment types that when used together provide greater trustworthiness of the integrity of the process of assessment;
- Departments and faculties establish guidelines to enable better informed decisions about how AI might be used or restricted in assessments;
- Departments and faculties to engage with students about guidelines for the use of AI in assignments;
- Departments to communicate these decisions to Faculty Teaching and Learning Committees;
- Encourage and support making assessments less open to be completed by generative AI;
- Explore and encourage AI use that enhances sound and caring assessment;
- Further develop the Assessment Studio to respond to evolving staff needs brought about by AI use – offered by CILT.

What is required (Medium/Long term)

- Support the wholesale redesign of assessments based on revised learning outcomes, possibly as part of curriculum redesign process;
- Support reconceiving authentic assessments so that they are less susceptible to AI misuse;
- Offer a short course on assessment for staff capacity building;
- Investigate tools to support assessment practices including tools to capture and assess process or which can support establishing authorship.

UCT policy documents refer to issues with implications for assessment integrity, such as research ethics, bias, social justice, multilingualism, data privacy, and others.

3. Promoting AI-enabled Innovation in Teaching, Learning and Curriculum Design

The rapid evolution and societal uptake of AI requires a thoughtful and future-facing approach to how UCT engages with its possibilities for teaching and learning. The innovation pillar signals UCT's intent to explore, test, and where appropriate integrate AI into our educational practices.

Globally, universities are at differing stages of how they are engaging with AI beyond concerns about assessment integrity and promoting assessment literacies. Some Australian universities have embraced AI as a collaborative and efficient tool, preparing students and staff to use it ethically and responsibly. While this requires significant academic upskilling, it reflects the need for universities to consider the role of AI to support or enhance their teaching and learning approaches. Given the emergent nature of AI tools, teaching staff could collaborate with students to explore applications for their specific disciplinary contexts to co-create ethical and appropriate uses for AI tools.

In this pillar, AI technologies may encompass generative AI as well as other types of AI.

Guidance and Support

AI-enabled innovation in teaching and learning is premised on leveraging the affordances of these emerging AI tools to enhance teaching and learning as well as considering how these tools may offer potential responses and solutions to UCT's institutional imperatives, such as supporting multilingualism, curriculum change and redesign, advancing digitally enabled education and supporting student success.

AI capabilities are expected to become ubiquitous at multiple levels within institutions. The table below sets out different categories of AI provision, each presenting different sets of issues which may need to be considered to inform appropriate choices.

Category	Description	Examples	Pros, cons, issues, risks
1. Individual	Freemium end-user (consumer) general purpose AI tools (typically LLMs), with optional paid-for enhanced models or capabilities. Accessed via personal profile or anonymously.	General: ChatGPT, Claude, Meta AI, DeepSeek AI Specialised: NotebookLM, LearnLM	Risk of **data leaks**: students or staff may upload personal or institutional data which is leaked to other users or violates copyright. Potentially **inequitable**: some students can pay for access to better tools.

Category	Description	Examples	Pros, cons, issues, risks
2. Corporate (Enterprise)	General-purpose AI tools available to students and staff through UCT site licenses. Authenticated via SSO with UCT credentials.	Google Gemini MS Copilot	May have access to **more user context** for better results. More **secure**. More **equitable**: all students have access to baseline functionality.
3. Application	Task-based AI features in enterprise platforms, digital learning platforms and plug-in teaching & learning tools. Features aim to improve productivity, or support a teaching & learning process (pedagogical intention) or scaffold student learning.	Amathuba Lumi Opencast lecture summaries Teams meeting summaries Tutoring chatbots Automated grading	**Pricing** pressure on software contracts, with **volatile** costing models. Vendors seek to transfer risk and impose obligations through **contract amendments**. AI capabilities are mediated by application and vendor (**opaque**) with less user or institutional control. **Fluid and unpredictable** landscape.
4. Cloud	Cloud-hosted LLM models hosted in secure client-specific containers (AI as a service). Provides a back-end capability for a website or application.	Amazon Bedrock Azure OpenAI	More **secure**. May be difficult to control **volume-based costs.** Requires **technical expertise** to integrate into applications or services. Access to **a wide range of models**.
5. Local Open source	Open source models run directly on institutional servers (on-premises or cloud)	Meta Llama DeepSeek	Most **secure**: all data and computation is under direct institutional control (especially when run locally). **Fixed cost** regardless of volume but **may not scale**. **Requires expertise** to set up and maintain.
6. Locally developed	Locally developed or adapted models run on dedicated hardware, or local, regional or national HPC infrastructure.	Research projects; student projects (typically Hons / Masters / PhD)	Successful projects may be narrow in application and **may not generalize** to broader use without commercialisation or additional engineering work.

Table 1 Categories of AI provision

Individual use of AI tools is likely to be widespread, as staff and students make use of freemium tools and may individually license their own AI tools in a rapidly emerging landscape. However, as UCT moves towards expecting or requiring students to use AI in the course of their studies, it will become increasingly important for the university to ensure that all students have equitable access to a baseline set of capabilities.

Stakeholders involved in the selection of tools at different levels of capability and affordance (as per the table above) need to engage the relevant institutional role players and adhere to all related policies. The Digital and Online Education policy requires "educational technology decisions to be made at a level appropriate to the scope and impact of the choices" (section 8.a). This implies that Departments and Faculties may license tools for discipline-specific purposes, whereas in the case of proposals to license tools at the enterprise level, this would need appropriate support from university-level committees and governance structures. ICTS will assess proposed enterprise solutions in terms of their security posture, alignment with enterprise architecture, and negotiate best pricing.

Work in this pillar will also explore alignment with the emerging capabilities of AI tools and institutional areas of work. For example, with the adoption of the UCT Language Policy (2024), there are opportunities to explore the potential of AI capabilities to support multilingualism. AI tools such as ChatGPT, DeepSeek, or voice-to-text applications could help students develop their language and academic writing skills across languages.

UCT has given attention to developing and prioritising use cases that speak to teaching and learning imperatives, and critically evaluating AI tools which can serve these needs. Staff and students are already finding and implementing AI for various use cases, including building custom bots for personal and course-level use, using AI as personal tutors, experimenting with AI tools for marking, grading and feedback, and using tools for developing course materials and assessments. To move beyond pockets of localised use and to ensure this use is ethical and responsible, this framework promotes a coordinated institutional approach to AI-enabled innovation in teaching and learning.

Roadmap to support AI-enabled Innovation pillar

What is being done

Currently there are pockets of exploration and experimentation occurring in various departments with requests for scaled up projects, access and testing of various tools and funding requests to innovate.

Institutional projects managed through CILT that are in development include:

- AI Teaching Innovation Grant launched by the DVC T&L in January 2025 and managed through the Teaching Awards and Grants sub-committee;
- exploring the use of AI tools provided within Amathuba as part of the D2L Lumi suite;
- piloting AI for generating notes from lecture videos to enhance accessibility and student learning
- evaluating various AI tools and use cases to assess their suitability and scalability for teaching and learning at UCT.

Short-term

- Establish a mechanism to gather data for current use cases and issue a call for new use cases. This could be via a sub-group of the OESC's AI in Education Working Group;

- Evaluate projects currently being piloted for extension or rollout e.g. formative assessment in Amathuba; and
- Set up a process to determine the feasibility of offering a set of baseline licensed or paid-for AI tools to support teaching, learning and assessment.
- Actively experiment with AI tools to support the imperatives of the UCT Language policy.

Medium or long-term

- Explore scalability and implementation from AI grant proposals.
- Explore multilingual support using AI technology where appropriate (e.g., course evaluation, lecture notes, etc.).

Roles and Responsibilities (Governance)

Various UCT policies guide the roles and responsibilities at different levels of the institution and should be consulted when considering the response to and adoption of generative AI.. Stakeholders groups include: University Executive structure; faculties, departments and support units at the operational level; and students and lecturers and teaching staff, and administrative staff at the individual level.

The roles and responsibilities of each stakeholder grouping will be discussed in the three categories listed to unpack the activities under each pillar:

1. AI literacies – supporting students and staff with making use of generative AI effectively and productively along with the ability to critically evaluate the trustworthiness and appropriateness of the results obtained.
2. AI assessment integrity – ensure the integrity of teaching, learning, and assessment in an AI-mediated environment.
3. AI-enabled innovations – exploration of AI tools for the effective and responsible use of AI in teaching and learning.

Executive

Under the office of the DVC Teaching and Learning, set strategic goals for promoting AI literacies at UCT, ensuring that every department is aligned in offering AI-related training and resources. Monitor the progress of AI literacies offerings and adjust institutional support where necessary.

Commission a review of existing policies relating to assessment integrity and assessment practice to determine whether policy revision is necessary

Oversee the development of guidelines for AI in assessment, aligned to relevant policies including the Assessment Policy and the UCT Policy for the Prevention and Management of Academic Misconduct by Students

Support the adoption of AI tools across UCT, leading initiatives that encourage collaboration between departments and motivate for appropriate resourcing. Foster an institutional culture of innovation, where AI is integrated responsibly into both teaching and operational practices.

Establish a centralised AI information hub - where all stakeholders can access curated resources, guides, and activities. This hub could also serve as a platform to promote AI-specific events, making it easier for departments, staff, and students to stay informed and actively participate in UCT's AI initiatives. Such a link would ensure a more coherent, streamlined approach to AI integration across the university. This hub may align with or be part of the forthcoming VC's Strategic AI Initiative.

Institutional level committees

The role of the Online Education subcommittee (OESC) as a subcommittee of the Senate Teaching and Learning Committee, is to ensure awareness of the AI in Education framework through communication with the DVC Teaching and Learning and the faculties and monitoring of the framework's roadmap. The committee reports on the activities of the UCT AI in Education working group and reports to the Senate Teaching and Learning committee.

Support Departments (ICTS, Libraries, CILT, Careers Services, CEA)

Support departments play a key role in providing the infrastructure, training, and resources to provide students, teaching staff and academics with the necessary resources and training opportunities to fulfil their roles and responsibilities.

Information and Communication Technology Services (ICTS)

Participate in the evaluation and testing the functionality of AI tools for Teaching & Learning, Research or Administration in collaboration with CILT. Assess potential solutions in terms of their security posture, alignment with enterprise architecture, and scalability. Negotiate with vendors and process purchases. Where appropriate, manage infrastructure, access and permissions. For some solutions, ICTS may provide first level support and training.

UCT Libraries

Offer training and guidelines to students specifically on AI library research tools and citation practices. Collaborate with other departments to make AI research and information literacy workshops available to both staff and students. Partner with academic staff in ensuring students acknowledge the use of AI, aligning with a commitment to good academic practice.

Provide tools and advice to students on the ethical use of AI in their research and writing. Explore emerging AI-enhanced library research tools that can help students and staff conduct advanced research. Collaborate with departments to explore new AI innovations in library services, ensuring these library tools enhance both teaching and research capabilities.

Centre for Innovation in Learning and Teaching (CILT) in CHED

Provide current and up to date resources and guidelines for staff and students to support AI literacies. Provide regular and customised training sessions, consultations and short courses as requested.

Collaborate with departments to create AI literacies materials tailored to fields and disciplines.

Work with academic staff to design assessments that respond to AI, offering guidance on how to incorporate or restrict AI tool use. Provide workshops to help lecturers adapt their assessments in line with UCT's Assessment Policy . Investigate tools that support assessment processes such as feedback and assessment of processes of learning.

Participate in testing and evaluating AI tools for teaching and learning in collaboration with ICTS. Support the AI Innovation grantees in implementation and evaluation. Evaluate and promote AI capabilities in Amathuba to establish teaching and learning use cases. Pilot AI tools such as AI chatbots or intelligent tutoring systems in partnership with departments. Evaluate the effectiveness of these tools and expand successful innovations across more programmes, continuously collaborating with departments to evaluate and refine AI integration.

Careers Service in CHED

Integrate AI skills into career programmes, offering workshops to students on AI competencies needed in the job market. Work closely with industry stakeholders to ensure students are prepared with the right AI skills for their careers.

Provide guidelines to students on the ethical use of AI when preparing job applications, ensuring CVs and cover letters reflect original work. Offer one-on-one support to review applications and highlight appropriate AI tool use.

Collaborate with employers to track the impact of AI in various industries, using this information to adjust career development programmes. Regularly update students on the latest AI-driven job market trends to ensure they stay competitive. Communicate to Departments and Executive the AI trends in various disciplines.

Centre for Educational Assessment (CEA) in CHED

Contribute to the exploration of assessment innovation, assessment integrity, AI-enabled testing platforms, and policy-informed evaluation particularly for large-scale standardised testing.

Office of Inclusivity and Change (OIC) and Disability Services

Promote the adoption of inclusive approaches to the use of AI tools by reviewing policies, materials and tools.

Works with other stakeholders (like ICTS and CILT) to guide the selection and implementation of AI tools to meet the needs of students and staff with disabilities.

Collaborate with faculties to modify curricula and assessments using AI tools that offer alternative, equivalent assessment modes, ensuring fair evaluation for students with disabilities.

Faculty and Departmental Level

Existing committees and structures, such as Faculty Teaching and Learning Committees or departmental committees, can effectively lead the implementation of UCT-wide AI initiatives.

These committees can promote the consistent application of AI tools and policies that are tailored to their specific faculties, departments, and disciplines. With support from Faculty Teaching and Learning

structures, these committees play a vital role in fostering AI literacies, maintaining assessment integrity, and driving innovation within academic programmes.

At this level, a priority will be to develop a consistent approach to AI-related academic integrity and support staff to design assessments that reflect the learning outcomes, reducing the risk of AI misuse. Departments can encourage AI innovation by piloting new tools and integrating AI into teaching and learning.

The Teaching and Learning committees can monitor and discuss emerging developments that might require adapted responses in the disciplines and contribute this feedback to the institutional level to keep the AI framework relevant.

Administrative Staff

Administrative staff ensure the smooth implementation of the Digital Online Education Policy and UCT's specific administrative processes, supporting the effective use of AI across the institution.

In their work, administrative staff may be able to engage with AI innovations such as workflow automation systems powered by AI, AI-enabled scheduling tools, and chatbots to provide student support. This will enhance their digital fluency and improve their operational efficiency.

Academic and Teaching Staff

Teaching staff are in the position to take the lead in developing and enhancing AI literacies within their disciplines. This involves introducing students to guides and resources available as well as AI tools relevant to their fields, advising them in using these tools critically and ethically or communicating to students if they are not allowed to use AI tools.

It is the role of teaching staff to ensure that AI use in assessments is transparent and fair and implement the UCT's Assessment Policy. Some disciplines more than others will be required to design curriculum and assessments that consider AI capabilities. Staff must communicate with students regarding the use of AI in courses or, if AI is not allowed, ensure that the students are aware of the reasons this choice was made. Where possible, staff should collaborate with students critically evaluating the use of AI tools in disciplinary contexts.

As specified in the Digital and Online Education Policy, 2024 (Section 6.g.), teaching staff are encouraged to become familiar with emerging technologies, explore AI innovations, and to attend training and workshops to keep abreast of AI landscape in their disciplines.

Students (Undergraduate and Postgraduate)

Students are responsible for engaging with AI literacies initiatives to build their understanding of how AI tools work, how to foster a culture of using them ethically, and how to critically evaluate the results they

generate. As specified in the Digital and Online Education Policy, 2024 (see section 6k.), students are expected to uphold academic integrity by ensuring their work reflects their own efforts, even when AI tools are used for support. Properly acknowledging AI usage is essential to maintaining accountability and ethical scholarship. They should abide by various policies such as UCT's Misconduct policy. Students need to understand the lecturer's approach to the use of AI tools and whether AI tools are allowed. Students should be advised on the ethical and secure use of third-party AI tools that may compromise privacy or academic integrity.

Students should be encouraged to explore AI innovations responsibly, applying AI tools to enhance their learning, especially considering accessibility and equity. Learning to use AI tools ethically and effectively can help prepare for careers where AI is a collaborative tool. Students could also be involved in co-designing AI-driven educational tools and approaches, partnering with staff to explore these innovations and make them relevant to their learning needs.

Implementation and Review

The implementation of the AI for Education Framework is not a fixed process but a dynamic, evolving effort that will respond to the rapidly changing landscape of artificial intelligence. The table below outlines the activities that the various stakeholders can work towards achieving over the next 12 months. The goal of the process is to gather feedback from faculties about what needs refinement with the intention of reaching a sufficient consensus to adopt a policy for the institution.

Stakeholder	Activities and Outputs	Timeline
Executive Level (Office of DVC Teaching and Learning)	UCT is committed to supporting the ethical and responsible use of AI, fostering critical AI literacies as a core competency for staff and students, and ensuring equity and accessibility in AI use. Review AI reports from the T&L committees on all outputs planned and implementation of the AI framework.	Short Term (12 months): Ensure faculties develop appropriate guidance for use of AI. Long Term (12 to 24 months): monitor progress and evaluate outcomes.
Online Education Sub-Committee	Lead the consultations on AI in education framework and guidelines for integrating AI in teaching and learning. Collaborate with departments to promote the framework across faculties, ensuring alignment with institutional policies. Review and update framework annually. Play the role of a centralised AI reporting structure gathering inputs from those coordinating activities across faculty and departments.	Short Term (0-12 months): Co-ordinate the consultation and framework review process. Medium Term (12 to 24 months): Gather feedback about AI tools in education. Review and update framework. Long term (24 to 36 months): Draft a policy on AI for Teaching and Learning for the institution.

Stakeholder	Activities and Outputs	Timeline
Teaching and Learning Committees	Work with academic staff to redesign assessments that either incorporate AI or protect against AI misuse. Review curriculum in specific disciplines to promote validity, critical thinking, creativity, and ethical use of AI tools. Gather data on AI use across disciplines. Aligned decisions with UCT's relevant policies.	Short Term (0-12 months): Collect data and ensure alignment with UCT policies. Share successful examples of AI integration in teaching with the relevant departments, committees or working group (i.e. UCT AI Working Group) to support broader understanding and adoption. Long Term (12-24 months): Implement policies and review alignment with AI framework.
Libraries	Organise AI capabilities workshops and training focused on ethical and critical engagement with AI tools. Work with other departments to communicate the ethical use of AI in research, teaching and learning. Provide AI-powered research tools and guides for students and academic staff.	Short Term (0-12 months): Roll out workshops and initial AI resources. Long Term (12-18 months): Integrate AI-powered tools into library services.
ICTS	Work with CILT to assess potential AI solutions for teaching and learning in terms of their security posture, the integration with enterprise architecture, and negotiate best pricing.	Short Term (0-12 months) Participate in the evaluation and testing the functionality of AI tools for different constituencies Long Term (12 –24 months) Negotiation with vendors and process purchases; and manage the infrastructure, access and permissions, when appropriate.

Stakeholder	Activities and Outputs	Timeline
CILT	Update self-paced AI literacies self-paced course, learning materials, workshops, guides, and resources for staff and students. Provide oversight and, where appropriate, undertake testing of AI tools relevant to teaching and learning contexts. Work with ICTS to assess potential enterprise-level AI tools.	Short Term (0 – 12months): Update all UCT-wide AI literacies training resources for staff and students. Gather evidence of use and adapt training resources based on feedback. Long Term (12 – 24 months): Expand pilot projects and integrate AI tools into learning modules.
Careers Service	Develop educational content and resources on AI in the World of Work Integrate AI World of Work trends, skills and ethical use for application processes in Careers Service offerings. Collaborate with employers and faculties on tracking the impact of AI on industries.	Short Term (0- 12 months): Include AI in the World of Work content in the Career Guide. Make digital resources available on the Careers website and market it through Careers Long Term (12 to 24 months): Integrate information on AI skills for the workplace in Career Readiness and Employability offerings (including webinars, workshops, relevant resources, one-on-one CV reviews and career consultations)
Centre for Educational Assessment (CEA)	Share insights running large-scale assessments, including developing AI-enabled secure online assessments, using testing platforms, developing training material, initiatives related to assessment integrity, and policy-informed evaluation.	Short Term (12 months): Provide feedback on existing assessment redesign resources Investigate whether AI capabilities could facilitate multilingual course evaluations. Long Term: Ongoing resource on designing large-scale assessments.

Stakeholder	Activities and Outputs	Timeline
HoDs (Heads of Departments) or Teaching and Learning Committees	Provide teaching staff with AI resources, guides and policies and customise them to the specific discipline. Conduct workshops and engagements on AI ethics and integrate AI literacies into core curriculum modules. Review and adapt assessments to incorporate AI tools or safeguard them against AI misuse.	Short Term (0-12 months): Workshops and curriculum review. Long Term (12-24 months): integration of AI literacies into the curriculum and AI-resilient assessments.
Teaching staff, academics, administrators and tutors	Provide discipline-specific AI tools and training for students. Encourage critical engagement with AI outputs. Revise assessments and curricula to reflect AI-driven changes in education. Prepare students for AI-driven professional environments and ensure ethical AI use in their academic work.	Short Term (0 -12 months): Access AI literacies training and courses. Align current UCT policies with ethical use of AI tools. Report to HoDs or Teaching and Learning Committees on incidences related to AI use. Introduce AI tools and revise assessments. Long Term (12-24 months): Ongoing curriculum updates and incorporation of AI-driven teaching innovations.
Students (undergraduate & postgraduate)	Develop and access AI literacies guides and interactive guidesto critically and ethically evaluate AI outputs and apply AI effectively in academic and professional contexts. Engage with AI tools responsibly, adhering to AI ethics policies.	Short Term (0-12 months): Participate in AI literacies courses. Long Term (12-24 months): Demonstrate AI proficiency in assessments and projects.

Related Policies

These UCT policy documents provide further guidance informing the development of AI literacies, academic integrity, assessment redesign, and AI tool use:

- UCT Policy for the Prevention and Management of Academic Misconduct by Students 2023
- Assessment Policy 2024
- Digital and Online Education Policy 2024
- Disability Policy 2021
- Language Policy 2024
- Interim: Privacy and Data Protection Policy 2021

Academic Misconduct Policy 2023

The UCT Policy for the Prevention and Management of Academic Misconduct by Students expect students to "always be able to defend the truthfulness and accuracy of the work they present as their own without the aid of technologies, materials or collaboration not allowed for the assignment". Cheating to gain an unfair advantage is considered misconduct and students who use generative AI to complete an assessment are considered together with those engaging in contract cheating, where a person pays someone else to do the work. The UCT policy does permit students to use "software that detects and corrects spelling and grammatical errors." AI use would also be permitted if this were explicitly stated in the assessment instructions.

"Cheating is the practice of attempting to gain an unfair advantage. This includes accessing prohibited materials in an examination, making use of 'essay mills', language models such as chatbots (e.g., ChatGPT and other large-language models or generative Artificial Intelligence), and any service or software that provides answers to assessments, or writes or re-writes assignments or parts thereof, other than software that detects and corrects spelling and grammatical errors. The only permissible instances of such practices are where they are explicitly permitted by the terms of the assessment instructions. In the case of group work, cheating includes students indicating that they have participated in group work when in fact they have not." (UCT Policy for the Prevention and Management of Academic Misconduct by Students).

Assessment Policy 2024

The UCT Assessment Policy (adopted in 2024) provides a framework to enable the conditions for redesigning assessments. This policy recognises assessment as an integral component of the curriculum and a means to project what we value. In relation to academic integrity: "Ensuring that the process or product offered for assessment meets the criteria stipulated for that assessment is crucial for valid decision-making. Steps should be taken to promote a culture of integrity and assessment practices that promote integrity. When required, collaboration should be stipulated. The challenges posed by generative artificial intelligence require thoughtful and creative responses in assessment design." (p.9 UCT Assessment Policy)

Digital and Online Education Policy 2024

The Digital and Online Education Policy for UCT (adopted in 2024) promote greater flexibility, accessibility and resilience through digital technologies, including assessment design.

"UCT is committed to engaging students and lecturers in an active learning community through relationships of care which privileges human mediation of digital education. The use of artificial intelligence technologies should be based on responsible and ethical practices that enhance and support active learning and teaching." (p.7 Digital and Online Education Policy for UCT).

UCT Disability Policy 2021

The UCT Disability Policy (adopted in 2021) also calls for a range of reasonable accommodations and alternative assessment modes so individuals with disabilities have equal and equitable access to opportunities.

The Disability Policy commits to maintain parity of access to education and university resources for students and staff with disabilities (p.4. Preamble). This is relevant in ensuring the design and format of AI literacies and AI tools consider the range of users to ensure fair access and reduce barriers. Disability Policy 2021

UCT Language Policy 2024

The UCT Language Policy acknowledges diversity within our community and an environment where language is valued as a resource for learning, research, and communication.

"Teaching and learning at the university will be informed by the dual principles of promoting South African indigenous languages as well as access to academic literacy in English. The university will empower educators and students to work collaboratively to draw on their multilingual repertoires for teaching and learning." (p.5 Language Policy).

The Language Policy also recognises the "need for software support for marginalised languages and various multilingual communications tools". It commits UCT to investigating "the theory, techniques, methods, and tools for software support for the official languages". (p.5 Language Policy) There is exciting potential to explore the use of generative AI for translation with human supervision.

Glossary

Definitions of common terms used in this framework related to AI (sourced from the UCT Libraries AILibGuide; CILT AI guides; UCT Policy on Short Courses; UCT Assessment Policy; and UCT Good Practices Assessment Guide)

Term	Definition
Adaptive Learning	Subject or course material is adjusted based on the performance of the learner. The difficulty of material, the pacing, sequence, type of help given, or other features can be adapted based on the learner's prior responses. https://circls.org/educatorcircls/ai-glossary
Algorithmic bias	Algorithmic bias occurs when AI systems generate skewed or unfair results due to inherent flaws in the data or algorithms.
AI Literacies	Developing an understanding of how AI works and the associated ethical issues. AI literacies include knowing how to use AI tools responsibly in different contexts, the critical evaluation of the outputs, and the capacity to make ethical decisions about AI use.
Amathuba	UCT's digital learning platform powered by D2L Brightspace.
Artificial Intelligence (AI)	The Artificial Intelligence (AI) definition has developed over time, from "the science and engineering of making intelligent machines" in 1956 (McCarthy, 2007, p.2) to broader ones describing AI as a range of technologies that perform intellectual learning tasks, such as machine learning, natural language processing, data mining, neutral networks or an algorithm (Zawacki-Richter et al., 2019). AI has become an integral part of various applications and settings. In simpler terms, AI refers to the simulation of human intelligence in machines. These systems are designed to perform tasks like learning, reasoning, problem-solving, and language understanding, often mimicking cognitive processes. Examples include chatbots, virtual assistants, and recommendation systems.
Authentic assessments	Assessments are authentic if they are realistic, need judgement and innovation, require students to "enact" the subject, assess their ability to effectively use their knowledge and skills to complete a complex task, mirror contexts which evaluate adults (e.g., workplaces, civic life), and offer opportunities to practice, consult resources, receive feedback and improve performance.
Generative AI	As AI evolves, a powerful branch called generative AI is emerging. This type of AI can create new content, like text, images, video, and code. ChatGPT, CoPilot and Google Gemini are examples of generative AI.

Term	Definition
Human-centered approach	A human-centered perspective sees AI systems working with humans and helping to augment human skills. In educational contexts, the teaching and learning relationships between people must be prioritised.
Large Language Model (LLM)	A type of machine learning model designed to understand and generate human language, trained on vast amounts of text data to perform various natural language processing tasks. Examples include the GPT models by OpenAI, Claude by Anthropic, Gemini by Google, LLaMA by Meta, and others.
Machine Learning (ML)	ML is a subset of AI that focuses on training machines to learn patterns from data and improve their performance on tasks over time without being explicitly programmed. Applications include spam filtering, fraud detection, and personalized content recommendations. In education, machine learning can be used to analyse patterns in student or institutional data to make predictions.
Natural Language Processing (NLP)	NLP is a branch of AI that enables machines to understand, interpret, and respond to human language. It powers applications like virtual assistants, translation services, and sentiment analysis.
Neural Networks	Neural Networks are computational systems inspired by the structure and function of the human brain. They consist of interconnected layers of nodes (or neurons) that process information. They are the building blocks of deep learning and are used in complex tasks such as pattern recognition and forecasting.

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UCT Resources

- Staff Guide: Assessment and academic integrity in the age of AI https://bit.ly/3MtP0IV
- Staff Guide: Teaching and learning with AI tools https://bit.ly/3NLL5ZD
- Student Guide: Using ChatGPT and other AI tools in education https://bit.ly/3XqrsLm
- Staff Guide: Developing effective prompts for Generative AI tools https://bit.ly/4dXYO9Q
- Researchers' Guide: Ethical use of Generative AI for research purposes https://bit.ly/3yTsA0G
- UCT Libraries AI Guide https://libguides.lib.uct.ac.za/AIforResearch

UCT Policies

- Academic Misconduct Policy 2023
- Digital and Online Education Policy 2024
- Assessment Policy 2024
- Disability Policy 2021
- Language Policy 2025

Websites

- https://libguides.chapman.edu/AI/glossary
- https://aascu.org/resources/a-university-leaders-glossary-for-ai-and-machine-learning/
- https://circls.org/educatorcircls/ai-glossary
- https://www.kcl.ac.uk/about/strategy/learning-and-teaching/ai-guidance