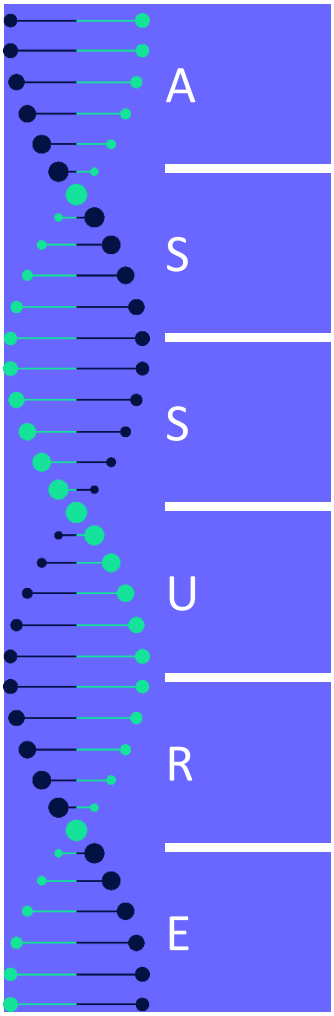
Federation University Artificial Intelligence Learning and Teaching *ASSURE* Framework

Leads: Tiffany Winchester, Charlie Duddridge, Aimee Turner, Nina Fotinatos

The *ASSURE* Framework (the 'Framework') provides overarching guidance to connect key aspects of learning and teaching with artificial intelligence (AI) powered technologies, with a particular focus on the pedagogical and ethical integration of generative artificial intelligence (GenAI). The framework informs an implementation plan designed to deliver evidence of learning, alignment with industry expectations, and assurance of academic integrity.

Figure 1: ASSURE Framework Elements



AI-Supported

Embed AI across teaching, learning, and curriculum design to enhance, not replace, human learning and decision-making.

Scaffolded

Structure curriculum and experiences so that both students and staff build AI literacy over time, with increasing complexity and autonomy.

Student-centred

Prioritise learner agency, inclusivity, and personalisation, especially when co-designing learning experiences involving GenAI.

Understandable

Ensure policies, expectations, and uses of AI are clearly communicated and consistently applied across learning and teaching practices, including in courses and units.

Responsible

Champion ethical, critical, and culturally aware GenAI use in collaboration with industry. Ensure AI use is equitable, accounting for varied levels of access and digital literacy.

Evaluated

Use data-informed practice, student feedback, and learning analytics (including AI insights) to continuously innovate and improve.

Its design is grounded firmly in TEQSA's evolving regulatory and strategic expectations:

- Gen AI Strategies for Australian Higher Education: Emerging Practice (November 2024) articulates a broader institutional model structured around three key dimensions: People, Practice, and Process
- Assessment Reform for the Age of Artificial Intelligence (November 2023) provides five guiding propositions for assessment design in AI -integrated contexts, focusing on ethical engagement, systemic course -level design, process visibility, collaboration, and secure verification

Adaptable to institutional policies, procedures, and course-level implementations, the Framework guides a consistent, scalable, and flexible approach across disciplines. It is designed to support institutions moving from reactive compliance to proactive, future-focused curriculum design that prepares learners for ethical, real-world AI engagement. Its design reflects a commitment to critical thinking, ethical decision-making, and learner-centred innovation.

The ASSURE Framework is implemented across several elements that collectively shape a future-focused, AI-enabled approach to education. These elements ensure that curriculum, assessment, teaching practice, and professional development are aligned to support student success in increasingly AI-integrated learning and industry environments. Each element encourages collaboration between academics, students, and industry, where relevant, ensuring that learning experiences are academically rigorous, co-designed, ethically grounded, and responsive. The ASSURE framework operates as an interconnected system where each element reinforces the others. Implementation should be iterative, with continuous feedback loops between all six elements to ensure human-centred, pedagogically sound, and ethically responsible AI integration in education.

1. Underpinning the ASSURE framework

The ASSURE Framework is underpinned by:

- TEQSA's GenAI Strategy for Australian Higher Education
    - TEQSA's Assessment Principles
- Framework Guiding Principles

Key terms used throughout this document are defined in Appendix A to ensure shared understanding and consistency.

1.1 TEQSA's GenAI Strategy Dimensions: People, Process, Practice

The ASSURE Framework aligns with TEQSA's broader GenAI strategy dimensions of People**,** Practice**,** and Process. These dimensions emphasise the need for a sector-wide response to GenAI that supports workforce capability and student development (People), pedagogical and assessment transformation (Practice), and governance and assurance mechanisms (Process).

1.1.1 TEQSA Assessment Principles

The TEQSA's Assessment Reform for the Age of Artificial Intelligence (TEQSA, 2023) and the TEQSA Assessment Reform Toolkit (Rowe, 2024) set two high-level principles: (1) assessments should equip students to engage ethically with ubiquitous AI, and (2) ensuring trustworthy judgments of student learning in the AI era requires multiple and contextualised assessment approaches (Rowe, 2024).

1. **Appropriate AI Engagement**
   Design assessment tasks that require students to engage with AI appropriately and authentically, reflecting discipline and industry needs.
2. **Course-Level Design**
   View assessment systemically across the course, aligning with disciplinary needs, graduate attributes, and AQF levels, rather than only on a unit or task level. This needs to be interpreted in context with TAFE requirements, including Units of Competency.
3. **Process over Product**
   Emphasise learning as a visible, iterative process. Assessment should reveal student thinking, decision-making, and ethical judgment over time, including opportunities for feedback and reflection on both the

product and the process, making human engagement and sense-making observable and assessable. This needs to be adapted at the relevant AQF level.

4. **Collaboration and AI**
   Create opportunities for students to collaborate with peers and AI in ways that reflect contemporary professional practice, while evaluating their unique contributions. Students should be encouraged to describe and critically reflect on the role of both human and technological contributions in the collaborative process.
5. **Ensuring Secure Checks**
   Enable targeted assessment points across the course that provide credible, direct evidence of individual student capability. These checkpoints—such as in-person, oral, or supervised tasks—should align with course-level outcomes and be used selectively to verify mastery for progression and graduation. Security measures should be proportionate and applied where they provide the greatest assurance of learning.

These propositions underpin the ASSURE Framework, providing a national benchmark that guides ethical, future-focused learning, teaching, and assessment design:

Table 1: Alignment of ASSURE Framework with TEQSA Assessment Propositions

ASSURE Framework		Appropriate AI engagement	Course-level design	Process over product	Collaboration and AI	Ensuring secure checks
A	**A**I-Supported	x	x		x	
S	**S**caffolded	x	x			x
S	**S**tudent-centred		x	x		x
U	**U**nderstandable		x		x	
R	**R**esponsible	x	x	x	x	
E	**E**valuated		x			x

1.2 Framework Guiding Principles

1. **Human-Centred Design**
   Learning and teaching should prioritise human agency. AI tools are integrated transparently and purposefully to enhance, not replace, student creativity, critical thinking, and academic ownership.
2. **Trustworthy Judgments Matter**
   Assessment systems must maintain institutional and public confidence through intentional course-level design and strategically placed secure checkpoints that verify individual student capability.
3. **Assessment Must Evolve**
   Assessment must evolve to remain credible, relevant, and aligned with both academic standards, community, and industry expectations. Authentic, process-focused, and student-centred tasks should reflect disciplinary norms and industry practices, ensuring that students develop capabilities that are both assessable and professionally meaningful in an AI-integrated environment
4. **Ethical, Safe and Responsible Use**

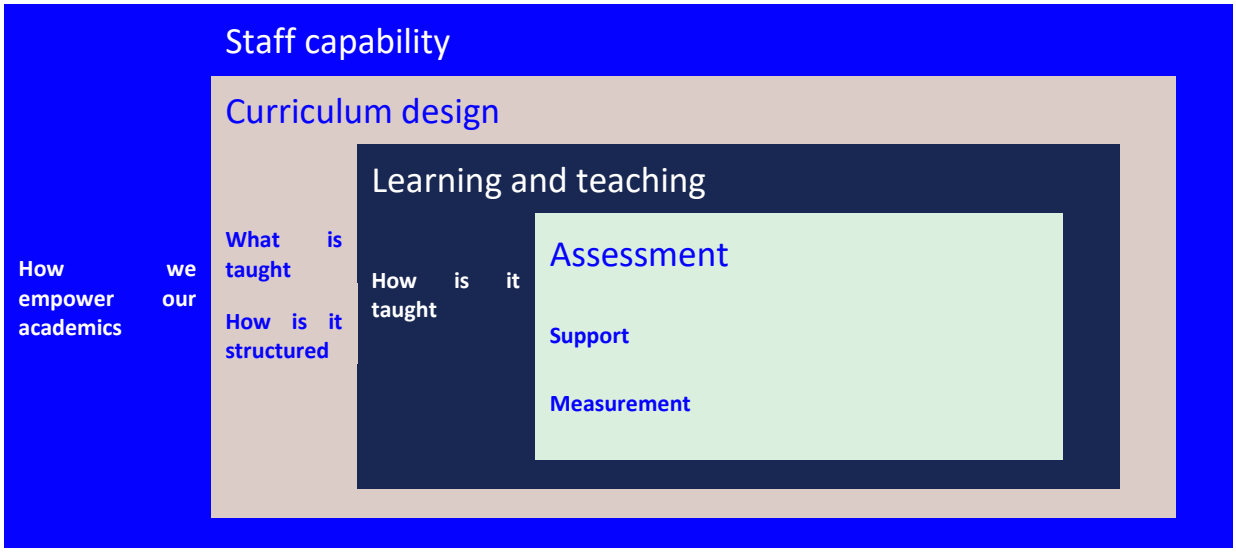
AI engagement should be fair, transparent, inclusive, and aligned with principles of academic integrity. Both staff and students must be supported to engage ethically and safely with emerging technologies.

5. **Artificial Intelligence Literacy**
   AI use must be underpinned by sound pedagogical and learning design principles. Learning experiences should build the AI literacy of all students and staff, empowering them to critique, evaluate, and apply AI tools with confidence and responsibility.

2. Implementation Plan

The implementation of the ASSURE Framework is across the four key aspects: *Staff Capability, Curriculum Design, Learning and Teaching Practice, and Assessment (See Figure 2).* These aspects foster inclusive learning environments, guide ethical and intentional integration of GenAI, and support quality assurance and academic integrity across institutional contexts.

Figure 2: ASSURE Framework Implementation



2.1 Staff Capability

"How we empower academics."

Staff capability is central to fostering inclusive, ethically grounded, and AI-integrated education. The table below identifies core focus areas for developing staff expertise, guiding professional learning, and ensuring intentional, academically rigorous, and integrity-focused use of GenAI in learning and teaching within the ASSURE framework.

Table 2: ASSURE framework and Staff Capability

	ASSURE Framework	Capability Focus
A	**A**I-Supported	Staff are engaged to build AI literacy, pedagogical confidence, and ethical capacity for teaching and modelling best practice in AI-integrated environments
S	**S**caffolded	Professional development opportunities are scaffolded and collaborative, supporting staff to design meaningful, inclusive, and discipline-aligned assessment and learning experiences
S	**S**tudent-centred	Staff are supported to design learning environments that that promotes student agency, personalisation, and co-creation of learning experiences, especially when integrating GenAI tools.

U	**U**nderstandable	Staff are empowered to interpret and consistently apply institutional policies, guidelines, and expectations for AI use in teaching and assessment.
R	**R**esponsible	Staff lead with integrity through policy-aligned, data-informed practice and ethical reflection on AI use.
E	**E**valuated	Staff engage in reflective, evidence-informed practice using data, analytics, and feedback, supporting innovation and continuous improvement in AI-integrated environments.

A practical summary of how each aspect can be implemented across learning and teaching contexts is provided in Appendix B.

2.2 Curriculum Design

"What we teach and how it's structured"

Curriculum design within the ASSURE Framework ensures that courses and units are intentionally structured to embed AI literacy, ethical reasoning, and future-focused capabilities. The table below outlines key design focus areas that align curriculum with graduate outcomes, accreditation requirements, and industry expectations—preparing students for success in an AI-integrated world. Curriculum should be inclusive, responsive, and adaptable to both disciplinary context and emerging technologies.

Table 3: ASSURE framework and Curriculum Design

	ASSURE Framework	Design Focus
A	**A**I-Supported	Embed AI capabilities as curriculum outcomes and design curriculum that enables students to engage critically, ethically, and authentically with GenAI tools.
S	**S**caffolded	Ensure curriculum structure, outcomes, and content progressively develop AI literacy and align with the needs of an evolving, AI-integrated workplace.
S	**S**tudent-centred	Co-design curriculum with students and industry partners to ensure relevance, authenticity, and ethical alignment.
U	**U**nderstandable	Clearly articulate AI-related curriculum goals, expectations, and policies to ensure consistent understanding and application across programs and units.
R	**R**esponsible	Design inclusive and adaptive curriculum that fosters ethical awareness, academic integrity, and responsible AI engagement.
E	**E**valuated	Continuously review and refine curriculum using data, stakeholder feedback, and AI-informed insights to ensure relevance, quality, and innovation.

2.3 Learning and Teaching Practice

"How we teach and facilitate learning"

Learning and teaching practices are central to creating inclusive, ethical, and AI-enabled educational experiences. The table below outlines key areas of focus to guide practice that empowers student agency, models responsible GenAI use, and responds to evolving learner needs. These practices align with institutional policy, support the progressive development of AI literacy, and promote continuous improvement through reflective, feedback-driven, and data-informed approaches.

Table 4: ASSURE framework and L&T Practice

	ASSURE Framework	Practice Focus
A	**A**I-Supported	Teaching practice should model ethical and purposeful GenAI use where appropriate, supporting student awareness and skill development.

S	**S**caffolded	Curriculum and learning experiences should build AI literacy progressively, enabling both students and staff to develop confidence, complexity, and autonomy over time.
S	**S**tudent-centred	Academics design active, inclusive learning experiences that promote student agency, critical thinking, and meaningful human–AI collaboration.
U	**U**nderstandable	Teaching practices consistently reflect and clearly communicate expectations for AI use across courses and units.
R	**R**esponsible	Practice fosters inclusive, adaptive, and evidence-informed learning environments that respond to learner needs and uphold academic integrity.
E	**E**valuated	Learning and Teaching is continually improved through reflective practice, feedback, learning analytics, and insights from GenAI tools.

2.4 Assessment

"How we measure and support learning"

At Federation University, the integration of GenAI in assessment is not optional; it is strategic and intentional. We are committed to ensuring that students graduate with both the academic capability and AI literacy required in a rapidly evolving professional landscape. Assessment must ensure credibility, equity, and relevance in AI-integrated contexts. This aspect promotes authentic, transparent, and future-focused assessment design that supports student learning and maintains institutional integrity.

Table 5: ASSURE framework and Assessment

	ASSURE Framework	Assessment Focus
A	**A**I-Supported	Embed GenAI into assessment design and delivery where appropriate, to support student learning, critical thinking, and workplace readiness.
S	**S**caffolded	Structure assessment tasks to build student capability in both human and AI-assisted judgment, with appropriate scaffolding and increasing independence.
S	**S**tudent-centred	Prioritise assessment design that allow students to demonstrate learning in diverse and authentic ways, accounting for AI use and learner agency.
U	**U**nderstandable	Make expectations about AI use in assessment clear, accessible, and consistent across units. Use transparent rubrics and examples.
R	**R**esponsible	Design assessments that uphold integrity and equity, with students critically reflecting on their use of GenAI, and staff modelling ethical practice.
E	**E**valuated	Use learning analytics, AI insights, and student feedback to continuously improve assessment design and evaluate learning outcomes.

To support trustworthy academic judgment and uphold the principles of assessment security and innovation, FedUni adopts a Dual-Lane approach to AI-integrated assessment design (Table 6). This approach is adapted from the Two-Lane model (University of Sydney, 2023) and supports the TEQSA-aligned principle of Ensuring Secure Checks. It provides a dual approach, which is adapted below:

1) Independent Capability: Tasks designed to assess students' core disciplinary knowledge, reasoning, and skills without GenAI assistance. These are typically supervised or scaffolded to ensure personal mastery, academic integrity, and clear evidence of individual capability.

2) Integrated Application: Tasks that mirror or transform real-world, professional, or collaborative contexts in which students interact with GenAI tools. These assessments emphasise ethical use, informed decision-making, and transparent acknowledgement of AI interaction and involvement.

All disciplines should incorporate a mix of Lane 1 (Independent Capability) and Lane 2 (Integrated Application) assessments across their courses, tailored to the needs of the discipline and its related industries. For example, in fields where GenAI is rapidly transforming professional practice, students may complete more Lane 2 tasks that involve the applied use, critical evaluation, and reflective justification of GenAI use. In contrast, disciplines where accreditation standards and ethical responsibilities emphasise personal accountability and professional judgement may place greater emphasis on Lane 1 tasks to demonstrate individual capability and independent reasoning. A purposeful and transparent mix of Lane 1 and Lane 2 tasks ensures students are prepared for real-world expectations, while upholding academic integrity and discipline-specific standards.

Unit Coordinators will decide whether the assessment is designed to align with the underpinning principles of either Lane 1 or Lane 2 (Refer to Table 6). Guiding resources will be developed to support staff as they design assessments to meet the overarching principles.

Table 6: FedUni Dual-Lane Approach

Lane 1: Independent capability	Lane 2: Integrated application
• Assesses core disciplinary knowledge without AI assistance • Tasks are supervised and/ or scaffolded for personal mastery • Ensures trustworthy academic judgement of application of knowledge and skills	• Applies disciplinary knowledge using GenAI tools • Tasks mirror professional, team-based or co-op contexts • Emphasises ethical AI use and industry relevance
Strategic Emphasis	**Strategic Emphasis**
• TEQSA Assessment Proposition 5: Ensuring Secure Checks • Framework Guiding Principle 2: Trustworthy Judgements • Framework Guiding Principle 1: Human-Centred Design	• TEQSA Assessment Proposition 1: Appropriate AI Engagement • TEQSA Assessment Proposition 4: Collaboration and AI • TEQSA Assessment Proposition 3: Process over Product • Framework Guiding Principle: 3: Assessment Must Evolve • Framework Guiding Principle: 4 Ethical, Safe and Responsible Use • Framework Guiding Principle 5: AI Literacy

Note: Further learning and teaching resources will be developed to support the development and implementation of Lane 1 and Lane 2 assessment types. Where appropriate, assessment can include elements of Lane 1 and Lane 2 types.

GenAI Acknowledgement

This document was developed with the assistance of GenAI tools to support drafting, synthesis, and refinement. All content has been critically reviewed, validated, and edited by academic and professional staff to ensure alignment with institutional policy, educational strategy, and pedagogical integrity.

GenAI tools were used to:

- Explore multiple phrasing options and structural formats
- Summarise research-informed frameworks and confirm alignment within the document

- Draft and refine implementation tables, guiding principles, and strategic statements

All decisions about content, framing, and institutional alignment were made by the authors. The use of GenAI reflects the ethical, intentional, and human-centred approach advocated by the ASSURE Framework.

References

Rowe, Michael (2024). *Report: Assessment reform for the age of AI*. https://www.mrowe.co.za/blog/2024/09/report-assessment-reform-for-the-age-of-ai/#:~:text=The%20report%20%E2%80%9CAssessment%20reform%20for,key%20points%20in%20educational%20programs

Tertiary Education Quality and Standards Agency. (2023). *Assessment reform for the age of artificial intelligence*. https://www.teqsa.gov.au

Tertiary Education Quality and Standards Agency (2024). *Gen AI strategies for Australian higher education: Emerging practice. https://www.teqsa.gov.au/guides-resources/resources/corporate-publications/gen-ai-strategies-australian-higher-education-emerging-practice?utm_source=chatgpt.com*

University of Sydney. (2023). *Assessment in the age of AI: The Two-Lane model*. https://teaching.sydney.edu.au

Appendix A: Definitions

Key Term	Definition
Academic	A teaching and/or research staff member responsible for curriculum design, delivery, and/or assessment at the University. May also include those in leadership roles influencing learning and teaching policy and practice.
Artificial Intelligence	A broad field of computer science focused on creating systems capable of performing tasks that typically require human intelligence, such as reasoning, learning, perception, and problem-solving. Includes both predictive and generative system.
Ethical use of GenAI	Applying it responsibly, fairly, and transparently to support learning while protecting students' rights, promoting equity, ensuring academic integrity, safeguarding data privacy, and maintaining human oversight in teaching and assessment.
GenAI	A subset of AI technologies capable of producing novel outputs (e.g., text, images, code) based on learned patterns from data. Examples include ChatGPT, DALL·E, and Copilot. Within this framework, “GenAI” is used to distinguish creative and assistive AI tools from broader AI applications
Graduate capabilities	The key knowledge, skills, and attributes students are expected to develop during their course of study, including discipline-specific expertise and transferable capabilities such as critical thinking, ethical reasoning, digital literacy, and AI literacy. It includes FedTASKs and Learning Outcomes.
Learner	Refers to both staff and students engaged in learning. Recognises the evolving, mutual nature of learning in AI-integrated environments.
Students	An individual formally enrolled in a course or unit of study. In the context of this Framework, students are recognised as active participants in co-designed, AI-enhanced learning experiences

Appendix B: Implementation Plan

Staff Capability					
What	**How**	**Details**	**Responsibility**	**When**	**Support**
Staff training	Building academic capability in teaching learning	Engage staff in ongoing conversations about GenAI that acknowledge both curiosity and discomfort to explore uncertainty, resistance, or ethical concerns in order to build confidence, critical thinking, and a culture of reflective practice.	Learning Designers Training and Content Library People and Culture	Ongoing	AI SWAT team
		Engage staff in scaffolded professional development opportunities and ongoing training in areas such as: ethical AI use, prompt design, assessment redesign, and digital literacy, including copyright guidance as an academic requirement			
Encourage Innovation	Provide appropriate technologies	Provide AI tools for staff productivity (e.g., lesson planning, rubric creation, marking support).	PVC Learning and Teaching, PVC Research and Innovation, ITS	Ongoing	Training and Content team, Discipline experts
		Provide specialised support for AI tools	ITS, Training and Content team, AI SWAT team	Ongoing	ITS, Training and Content team, Discipline Experts, AI SWAT team
	Support collaboration and dissemination	Encourage academics to experiment and share AI teaching practices in community of	ADLTs, Heads of Disciplines, Course Coordinators	Ongoing	Deputy PVC Deputy, PVC

		practice, including reward and recognition and other relevant formats.			(L&T); ADLTs PDVC
	Encourage OSP arrangements to expand GenAI awareness within specific disciplines/industries	See Outside Studies Procedure (OSP) eligibility	Academic Staff	See procedure	Heads of Disciplines

Curriculum Design					
What	**How**	**Details**	**Responsibility**	**When**	**Support**
Embed AI literacy as a graduate capability.	Transform FedTASKs to include AI	Review the FedTASK descriptor for digital literacy to ensure it adequately addresses the needs of AI	PVC Learning and Teaching	December 2025	Learning and Teaching CoP
	Transform Course Learning Outcomes	Review and revise course learning outcomes with the ethical, critical, and applied use of AI, ensuring readiness for diverse, evolving professional environments	Course Coordinator	2025 onwards	Heads of Discipline, Learning Designers, ADLTs
Scaffold AI literacy and capabilities holistically	Co-Design	Work with students and industry partners where relevant	Unit Coordinators	Ongoing	Course Coordinators, Learning Designers, ADLTS
	Constructive Alignment	Map and align unit learning outcomes, assessment and unit	Unit Coordinators	Ongoing	Course Coordinators, Learning Designers, ADLTS

		content with course learning outcomes, to account for AI inclusion			

Learning and Teaching					
What	**How**	**Details**	**Responsibility**	**When**	**Support**
Use AI as a co-teacher*	Enhancing educator efficiency through AI while demonstrating responsible and purposeful use.	Implementing human-validated GenAI use to enhance learning, teaching, and administrative practices.	Content Creators	Ongoing	ITS, Training and Content team, Learning Designers, AI SWAT team
		Use GenAI to generate real-time examples, scaffold writing, simulate scenarios.	Content Creators	Ongoing	ITS, Training and Content team, Learning Designers, AI SWAT team
Support differentiated instruction using GenAI*	Use GenAI, when appropriate, to meet the needs of diverse students	Use GenAI to provide multiple explanations, formats, or learning pathways	Content Creators	Ongoing	ITS, Training and Content team, Learning Designers, AI SWAT team
	Personalising learning through innovation	Use AI within the LMS to direct student learning pathways, based on current understanding	Content Creators	Ongoing	ITS, Training and Content team, Learning Designers, AI SWAT team

Integrate AI-enhanced learning activities*	Develop student capabilities in GenAI use	Incorporate appropriate GenAI use into learning and teaching activities and resources	Content Creators	Ongoing	ITS, Training and Content team, Learning Designers, AI SWAT team
	Facilitate AI-augmented flipped learning	Incorporate opportunities for students to interact with GenAI before class, then critically discuss or apply outputs in class	Content Creators	Ongoing	ITS, Training and Content team, Learning Designers, AI SWAT team

Assessment					
What	**How**	**Details**	**Responsibility**	**When**	**Support**
Assessment Mapping	Determine the overarching needs of courses with respect to a ratio of Lane 1 (independent) and Lane 2 (integrated) tasks	Review the course from a co-design with industry perspective to determine relevance and extent of GenAI in assessment	Heads of Discipline, Course Coordinators	June 2026	ADLTs, Learning Designers, Industry Advisory Groups
	Identify where Lane 1 (independent) and Lane 2 (integrated) tasks sit across each course	Review and revise assessment holistically, for assurance of learning and GenAI outcomes, ensuring assessment: • assesses independent capability of students (Lane 1) without GenAI usage • requires students to declare and reflect on how GenAI was integrated in their assessment process (Lane 2)	Heads of Discipline, Course and Unit Coordinators	December 2026	ADLTs, Learning Designers

Assessment Redesign*	Design assessments that are AI-aware	Redesign tasks using the TWO PRISMS framework to support GenAI integration and transparency	Unit Coordinators	On-going	Learning Designers

*Where relevant, authentic, and fit-for-purpose

Note: 1 The PVC (Learning and Teaching Portfolio) will lead a SWAT team to support the rollout of the GenAI L&T Framework, including updates to documents and development of new resources (where appropriate). This new SWAT team is scheduled to commence Monday 8 September, led by Lecturer, Assessment and Academic Integrity (currently in process with People and Culture) to support the development of resources.

Next Steps:

- Sharing with CoP L&T (Share current version 3.1) – Done (Closed 13.8.25)
- Sharing with the AI L&T Working Group (29.7.25) – Done
- Update V4 and incorporate feedback – 15.8.25 - Done
- Send to Shari regarding images – 15.8.25 – Done
- Uni-wide feedback 3 weeks – closed 29.8.25 - Done
- Discussed at AoL Meeting 3.9.25; Revisions to be made and then shared on the TEAMS site – Done
- Sep 4 send to LTQC Agenda (September 18 meeting) for noting
- Seeking Endorsement from the L&T Gen AI Working Group

End of Document