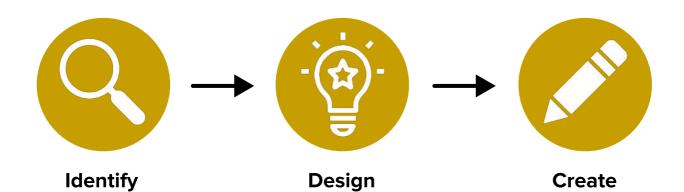




What are Learning Outcomes?

Learning outcomes are clear, specific statements that describe what students will know, understand, and be able to do upon successful completion of a unit or course. They serve as the starting point for constructive alignment in learning design, which follows a systematic process:



Identify the intended learning outcomes.

Design valid, inclusive, sustainable assessments that measure these outcomes.

Create suitable learning activities that prepare students for success.

Types of Learning Outcomes

Unit Learning Outcomes (ULOs)

Unit learning outcomes define what students will achieve upon successful completion of a specific unit. They must be clearly communicated in the Unit Outline and directly linked to unit assessments to ensure constructive alignment. Where units are a central part of a course, ULOs should map to and build to CLOs. For units that sit across multiple courses, this may not be possible.

Course Learning Outcomes (CLOs)

Course learning outcomes describe the knowledge, skills, and capabilities students will demonstrate upon completing an entire course or degree program. These outcomes often align with requirements from professional accrediting bodies or are benchmarked against comparable programs at other universities to ensure industry relevance and academic standards. All course learning outcomes must be comparable with the relevant AQF level criteria.

Major Learning Outcomes (MLOs)

Major learning outcomes at Curtin supplement course learning outcomes by aggregating multiple unit learning outcomes within a specific discipline area. They provide greater discipline-specific focus and nuance than the broader course learning outcomes.

Specialisation Learning Outcomes (SLOs)

Specialisation learning outcomes define what students will achieve within their chosen area of specialisation. While not listed on students' testamurs, they appear on official transcripts to document specialised competencies.

Graduate Capabilities (GCs)

Curtin has six graduate capabilities that serve as the overarching framework for all learning outcomes at our university. All unit and course learning outcomes must map to these graduate capabilities to ensure that graduates embody Curtin's distinctive educational values and competitive advantage in the marketplace.

Introduction to alignment

What is Curtin's recommended Learning Outcome alignment?

For students to achieve graduate capabilities and course learning outcomes, all outcomes should be aligned in a clear hierarchy moving from the most narrowly defined outcomes (Unit Learning Outcomes) to the broadest (Graduate Capabilities).

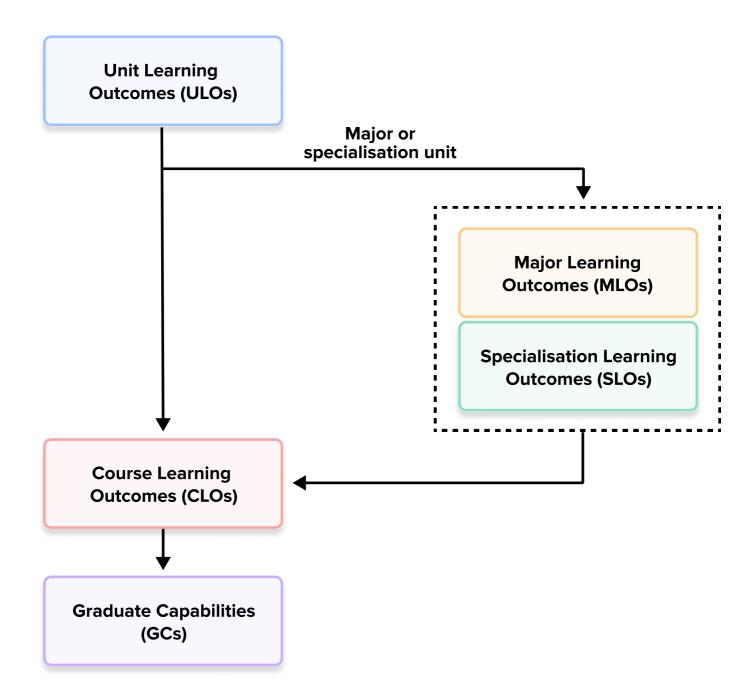


Figure 1. Learning Outcomes alignment

This alignment ensures that learning activities purposefully build towards assessment tasks, which develop and verify specific unit outcomes, which in turn contribute toward major and course learning outcomes and graduate capabilities.

Modifying Learning Outcomes

Changes to Learning Outcomes require Level 1 (School-level) or Level 2 (Faculty-level) changes in AKARI. These types of change must be approved through the designated approval pathway as outlined in step three.

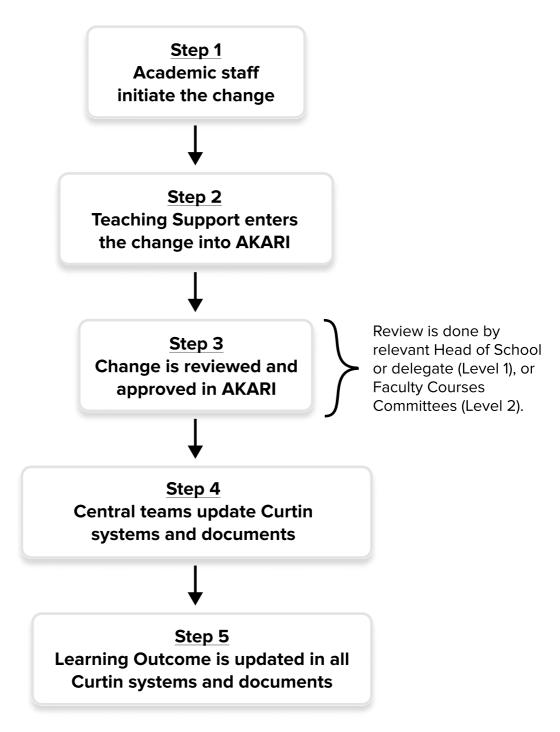


Figure 2. Learning Outcome change process

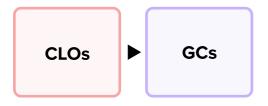
For more information, consult Schedule 2: Levels of Change in the Curtin Course Quality Assurance Manual: curtin.edu.au/about/governance/compliance-legal/find-a-policy/



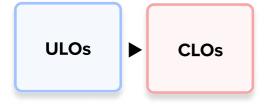
Accurately recording Learning Outcome alignment in AKARI

The effectiveness of course mapping starts with data quality. Data in AKARI must be correct to ensure the validity of the assessment mapping process. Assessment 2030 guidance recommends that the following AKARI data is up to date and clearly identifies the relationships between learning outcomes.

ULOs should not be mapped to an excessive number of CLOs or Graduate Capabilities, as too many connections can dilute meaningful alignment patterns.



CLOs should be mapped to individual Graduate Capabilities on a one-to-one basis. This means that a single CLO should not attempt to incorporate multiple Graduate Capabilities.



All ULOs should align to CLOs. ULO to CLO alignment should be recorded in AKARI. This process is often updated through Comprehensive Course Reviews and/or Annual Course Reviews.

This alignment is specific to the course; mapping should be performed by the course lead/coordinator and entered in AKARI, often with assistance from teaching support. Where possible, ULOs should be mapped to CLOs on a one-to-one basis.



ULOs should also be mapped to individual Graduate Capabilities on a one-to-one basis (where possible).

For accreditation purposes, you should also link CLOs to Professional Competencies (PCs). This will help demonstrate alignment with professional standards and competencies.

Example of Learning Outcome alignment

Unit Learning Outcomes

Evaluate the impact of Demonstrate culturally responsive Create and evaluate culturally colonisation and the effects of behaviours in a variety of intercompetent family-centred ways of historical policy and practice professional settings. working with Indigenous families. decisions on Aboriginal people. Unit 1 Unit 2 Unit 3 Critically appraise how Explain the effects of trauma on experiences of mental health, individuals, families, communities, distress, illness, and wellbeing are and practitioners, including the shaped by gender, age, sexuality, specific experiences of cultural heritage and (dis)ability, Indigenous Australians. including the specific experiences of Indigenous Australians. Create trauma-informed practice responses. Unit 4 Unit 5 **Course Learning Outcome** Value and respect the knowledge of Indigenous Australians; understand the effects of Australia's colonial history and demonstrate advanced culturally responsive and inclusive practices; demonstrate commitment to social justice including human rights. **Graduate Capability** Culturally competent to engage respectfully with local First Peoples and other diverse cultures.

Figure 3. Learning Outcome alignment across a course

Through engagement with multiple ULOs across different units, students develop the knowledge and skills needed to achieve the associated Course Learning Outcome, which in turn is aligned to a specific Graduate Capability. This alignment ensures that learning within individual units progressively builds toward achieving the course-level outcomes.

Writing Learning Outcomes

In this section we will go over three key steps to help support the crafting of learning outcomes.

Step 1: Stick to Core Principles

- Write from the student's perspective Learning outcomes describe what students will achieve, not what you'll teach. Focus on realistic goals students can meet by the end of your unit or course.
- **Use strong, specific verbs** Choose action words that reflect the cognitive level you're targeting—like "analyse," "design," "evaluate," or "implement." Avoid vague terms like "know" or "understand." Stick to one verb per outcome.
- Follow a clear structure [Verb] + [What] + [Context/Application]

Example: Design network solutions for small to medium enterprise environments

Step 2: Align with Academic Standards

- Match your course's AQF level Ensure your outcomes reflect the appropriate complexity, autonomy, responsibility, and application context for your qualification level.
- **Make outcomes assessable** Every learning outcome must be measurable and observable through specific assessment tasks like reports, exams, or presentations.
- Include application context Specify where and how students will apply their knowledge—"in professional practice," "in multidisciplinary teams," "in laboratory environments." This clarifies expectations and demonstrates real-world relevance.

AQF Level 7 example: Apply theoretical and technical knowledge to solve routine and emerging problems in professional ICT practice, demonstrating autonomy, well-developed judgment, and responsibility for own learning and professional development.

Step 3: Consider Mapping and Integration

- **Connect the levels** Link Unit Learning Outcomes (ULOs) to Course Learning Outcomes (CLOs), and map CLOs to Curtin Graduate Capabilities and relevant professional standards (Engineers Australia, ACS, AITSL).
- Create a suitable number of LOs 3-5 for ULOs and 6-9 for CLOs are recommended.



Table 1: Revised Bloom's Cognitive Domain: Selected action verbs

Remember	Understand	Apply	Analyse	Evaluate	Create
Identify	Explain	Demonstrate	Examine	Assess	Design
List	Summarise	Implement	Differentiate	Critique	Construct
Recall	Interpret	Execute	Investigate	Judge	Develop
Define	Compare	Use	Deconstruct	Justify	Formulate
Describe	Classify	Solve	Organise	Recommend	Produce

Adapted from Australian National University (n.d.); see also Anderson et al. (2001)



Best practice guidance on scaffolding Course and Unit Learning Outcomes

As per <u>ASPM</u> guidance, each course must assure student learning via one of two options:

Option 1

The course will ensure that every core or alternate core unit will derive at least 50% of the total available marks from Secure

Assessment.

Option 2

All course learning and major learning outcomes will be demonstrated at least once through a Secure Assessment(s).

The best practice guide outlines an approach to achieving Option 2 via scaffolded curriculum design that supports student progression through deliberate introduction, development, and verification of learning.

DID YOU KNOW?

To enable students to develop and demonstrate course learning outcomes and graduate capabilities, learning and assessment must be scaffolded across a course. Curriculum and assessment should be organised purposefully to ensure that each course learning outcome has clearly defined points of introduction, development and verification (via secure assessments) across its constituent units.

Scaffolding should be articulated at the unit level within ULOs that are appropriate to the associated point of student progression within the course structure.

Assessments aligned to these ULOs should enable students to demonstrate and receive feedback on their progress toward the CLO.

Learning activities and content within respective units should enable students to develop the required skills and knowledge to reach the level being assessed.

Scaffolding example



Introduce

Students are introduced to a CLO via foundational content, learning activities, assessment tasks and feedback that are appropriate to initial engagement, skill development and prior knowledge expectations.

The ULO reflects the expected level of CLO progression at this scaffolding stage (e.g. by using lower-order verbs from Bloom's Taxonomy).



Develop

Students engage with intermediate content, learning activities, assessment tasks and feedback that build upon foundational learning to advance their progression toward the CLO.

The ULO reflects the expected level of CLO progression at this scaffolding stage.



Verify

Student achievement of a CLO is verified at the level of mastery (at the point in a course where a student is required to meet the CLO).

Verification of student learning (or assurance of learning) is performed in a secure assessment task that can validly measure achievement of the CLO.

ULOs at the verification stage may individually demonstrate full CLO competency, or work collectively with other mastery-level ULOs to verify complete CLO achievement

Figure 4: Alignment of ULOs, CLOS and GCs, including course-level scaffolding and location of Lane 1 (secure) assessments

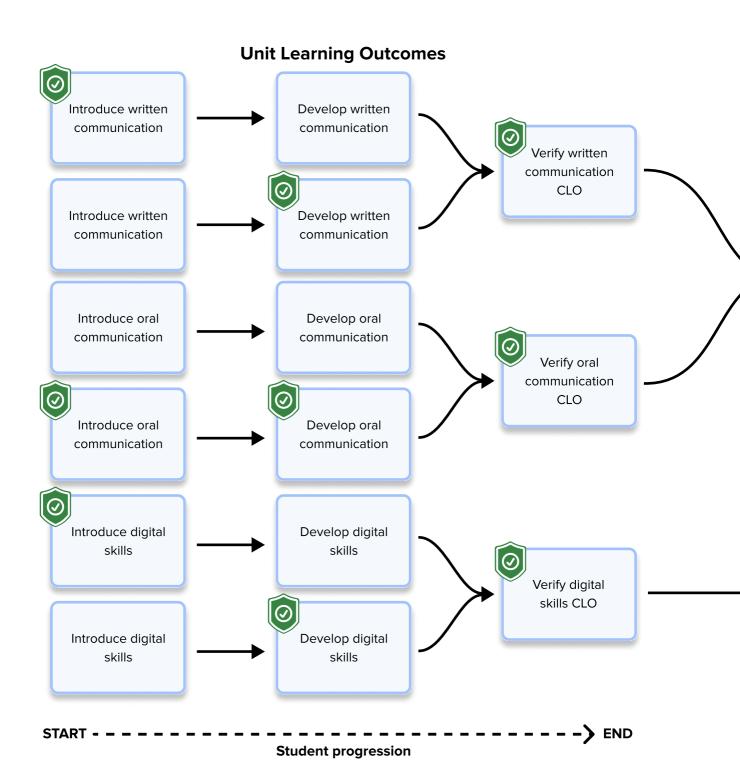
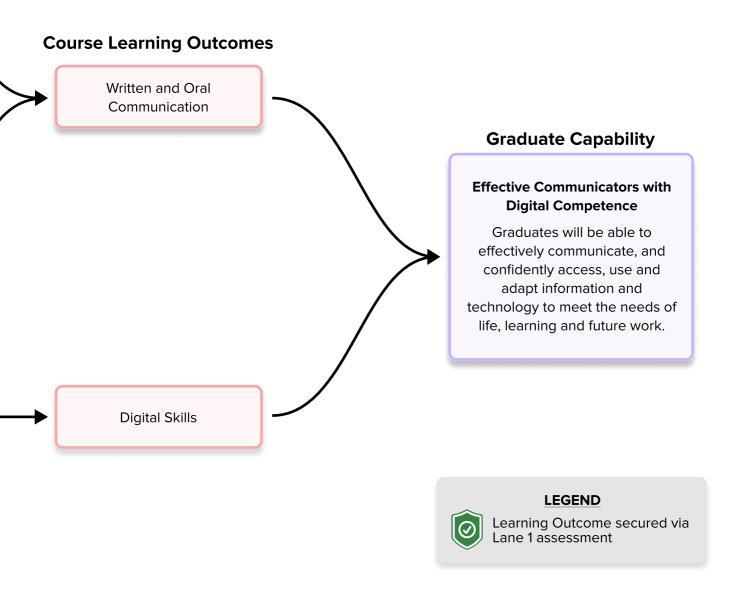


Figure 4 demonstrates the scaffolding of ULOs from introduction, development, to verification stages. This scaffolding supports and eventually measures the achievement of course learning outcomes for 'written and oral communication' and 'digital skills'.

These two CLOs align to the Graduate Capability 'Effective Communicators with Digital Competence.' Yellow shading indicates ULOs at critical progression points that are assessed using secure assessments.



The diagram also illustrates how a course learning outcome may need be verified across multiple assessments to ensure validity. For instance, a CLO covering written and oral communication is verified via two separate ULOs and their associated assessments (such as a written task and oral assessment respectively).



Sources

Anderson, Lorin W., David R. Krathwohl, Benjamin Samuel Bloom. 2001. A Taxonomy for Learning, Teaching, and Assessing: A Revision of Bloom's Taxonomy of Educational Objectives. New York: Longman.

Australian National University. n.d 'Selecting Action Verbs,' ANU Teaching and Learning: https:// learningandteaching.anu.edu.au/resources/revised-blooms-taxonomy-and-list-of-verbs/ Accessed: 30/06/2025.

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For more information

To learn about Assessment 2030, visit our <u>website</u> and view our Strategic Planning Document.

Join us at the Assessment 2030 Showcase

All Curtin staff are welcome to join us for this exciting event, which will showcase various case studies and expertise from our community on how they have transformed assessment practices in the age of GenAl.

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