

Training and Assessment Strategy (TAS)

ICTGAM533 — Create complex 3-D interactive games

RTO	[RTO name]
Training package	Information and Communications Technology
Unit release	1 (current)
Delivery mode	online
Document	Training & Assessment Strategy · version 1.0 · review by [review date]

1. Unit and purpose

Unit code	ICTGAM533
Unit title	Create complex 3-D interactive games
Training package	Information and Communications Technology
Release	1 (current)
Unit sector	Game development

Application

This unit describes the skills and knowledge required to use original and innovative ideas and industry-standard production techniques, to create functional games according to specific design briefs. It applies to those who support the design, development and programming of interactive 3-D media, and digital games as part of a larger development team. No licensing, legislative or certification requirements apply to this unit at the time of publication.

2. Target cohort and entry

Target cohort	Fully online e-learning cohort studying game development at Diploma level; learners work with an industry-standard game engine on their own hardware.
Entry requirements	ACTION ITEM: confirm entry requirements for this cohort (RTO-specific).
LLN considerations	[to be completed by RTO]

ACTION ITEM: Record pre-enrolment language, literacy and numeracy (LLN) outcomes for this cohort, in line with the 2025 Standards for RTOs.

3. Delivery approach

Delivery mode	online
AQF level	AQF 5
Duration	16 weeks
Volume of learning	120 hours

Amount of training	72 hours structured training (derived from volume of learning — confirm)
Clustering	This unit is delivered and assessed as a stand-alone unit.

4. Learning resources and facilities

- Online learning platform (LMS)
- Game engine software (student-supplied or institution-licensed)

Simulated environment	No
Simulation detail	Not applicable
Work placement	No

5. Assessment strategy

Activity	Element	Method	Items
E1 Knowledge Questions — Prepare to create game	E1 — Prepare to create game	knowledge questions	6
E1 Project — Plan the game production	E1 — Prepare to create game	project (submitted evidence)	5
E2 Knowledge Questions — Evaluate game-engine software and tools	E2 — Evaluate capability of game-engine software and tools	knowledge questions	3
E2 Project — Select the game engine and tools	E2 — Evaluate capability of game-engine software and tools	project (submitted evidence)	3
E3 Knowledge Questions — Prepare required assets	E3 — Prepare required assets for a game	knowledge questions	3
E3 Project — Prepare and customise game assets	E3 — Prepare required assets for a game	project (submitted evidence)	4
E4 Knowledge Questions — Use game-engine software and development tools	E4 — Use game-engine software and development tools	knowledge questions	3
E4 Project — Build and run the game prototype	E4 — Use game-engine software and development tools	project (submitted evidence)	3
E5 Knowledge Questions — Evaluate game prototype	E5 — Evaluate game prototype	knowledge questions	3
E5 Project — Evaluate and endorse the prototype	E5 — Evaluate game prototype	project (submitted evidence)	5
E6 Knowledge Questions — Transform prototype into final publication	E6 — Transform prototype into final publication	knowledge questions	3
E6 Project — Deliver the final publication	E6 — Transform prototype into final publication	project (submitted evidence)	4

Preferred assessment methods

- knowledge_questions
- project

Assessment is designed against the principles of assessment (validity, reliability, flexibility, fairness) and the rules of evidence (valid, sufficient, authentic, current).

6. Assessor requirements

Assessors hold the current TAE assessor credential, demonstrated vocational competency at least to the level being assessed, and current industry skills and knowledge. [to be completed by RTO]

7. Delivery and assessment schedule

Week	Focus (element)	Indicative learning content	Assessment
1	E1 — Prepare to create game (part 1 of 4)	1.1 Obtain the project brief; 1.1 Gather required supporting documents; 1.1 Obtain organisational procedures; 1.1 Validate and clarify requirements ...	Formative check-in
2	E1 — Prepare to create game (part 2 of 4)	1.3 Discuss asset formats with required personnel; 1.3 Discuss integration issues; 1.3 Agree technical budgets and engine constraints; 1.3 Document integration decisions	Formative check-in
3	E1 — Prepare to create game (part 3 of 4)	1.4 Understand beta-version prototype purpose; 1.4 Map dependencies and critical path; 1.4 Build the beta development sequence; 1.4 Plan iteration and beta readiness ...	Formative check-in
4	E1 — Prepare to create game (part 4 of 4); E2 — Evaluate capability of game-engine software and tools (part 1 of 3)	1.6 Define monitoring strategies; 1.6 Monitor quality and Definition of Done; 1.6 Manage variance, risk and critical path; 1.6 Communicate progress and update the schedule ...	E1 Knowledge Questions — Prepare to create game (knowledge questions); E1 Project — Plan the game production (project (submitted evidence))
5	E2 — Evaluate capability of game-engine software and tools (part 2 of 3)	2.2 Translate the game concept into requirements; 2.2 Assess play requirements against engine systems; 2.2 Assess hardware constraints and performance fit; 2.2 Assess asset integration and production pipeline ...	Formative check-in
6	E2 — Evaluate capability of game-engine software and tools (part 3 of 3)	2.4 Make the final software and tool selection; 2.4 Select for creative, production and technical balance; 2.4 Lock in the asset and integration toolchain; 2.4 Document, justify and prepare the selected environment	E2 Knowledge Questions — Evaluate game-engine software and tools (knowledge questions); E2 Project — Select the game engine and tools (project (submitted evidence))
7	E3 — Prepare required assets for a game (part 1 of 2)	3.1 Plan the shared asset environment; 3.1 Choose version control for asset sharing; 3.1 Organise folders, names and metadata; 3.1 Control access, reviews and project risk ...	Formative check-in

Week	Focus (element)	Indicative learning content	Assessment
8	E3 — Prepare required assets for a game (part 2 of 2)	3.3 Create visual assets in-house; 3.3 Acquire assets legally and strategically; 3.3 Prepare acquired assets for the project pipeline; 3.3 Produce asset packages for integration ...	E3 Knowledge Questions — Prepare required assets (knowledge questions); E3 Project — Prepare and customise game assets (project (submitted evidence))
9	E4 — Use game-engine software and development tools (part 1 of 2)	4.1 Scripts, code and the engine workflow; 4.1 Creating and modifying scripts deliberately; 4.1 Combining assets into playable objects; 4.1 Combining code and assets through reusable systems ...	Formative check-in
10	E4 — Use game-engine software and development tools (part 2 of 2)	4.2 Defining gameplay elements from requirements; 4.2 Building core gameplay elements in-engine; 4.2 Checking gameplay against technical constraints; 4.2 Quality checking gameplay elements ...	E4 Knowledge Questions — Use game-engine software and development tools (knowledge questions); E4 Project — Build and run the game prototype (project (submitted evidence))
11	E5 — Evaluate game prototype (part 1 of 4)	5.1 Identify who must see the prototype; 5.1 Prepare the demonstration build; 5.1 Run the demonstration professionally; 5.1 Turn comments into usable feedback ...	Formative check-in
12	E5 — Evaluate game prototype (part 2 of 4)	5.3 Prepare for change discussions; 5.3 Negotiate required changes; 5.3 Document agreed changes; 5.3 Confirm shared agreement ...	Formative check-in
13	E5 — Evaluate game prototype (part 3 of 4)	5.5 Organise user trial feedback; 5.5 Interpret player feedback carefully; 5.5 Evaluate technical and production implications; 5.5 Produce evaluation findings	Formative check-in
14	E5 — Evaluate game prototype (part 4 of 4); E6 — Transform prototype into final publication (part 1 of 3)	5.6 Understand endorsement; 5.6 Plan the transition to complete product; 5.6 Build the production roadmap; 5.6 Maintain endorsement through development ...	E5 Knowledge Questions — Evaluate game prototype (knowledge questions); E5 Project — Evaluate and endorse the prototype (project (submitted evidence))
15	E6 — Transform prototype into final publication (part 2 of 3)	6.2 Reading the specification before integration; 6.2 Integrating assets and systems; 6.2 Integrating gameplay, UI and audio; 6.2 Confirming feature completeness ...	Formative check-in

Week	Focus (element)	Indicative learning content	Assessment
16	E6 — Transform prototype into final publication (part 3 of 3)	6.4 Understanding final sign-off; 6.4 Preparing for the sign-off review; 6.4 Managing feedback during sign-off; 6.4 Recording final approval ...	E6 Knowledge Questions — Transform prototype into final publication (knowledge questions); E6 Project — Deliver the final publication (project (submitted evidence))

This week-by-week schedule is derived from the SAME weekly chunking that allocates the delivered weekly books and question categories, so this TAS and the shipped materials agree by construction. Timings are indicative — confirm dates against the group timetable.

Elements at a glance

Element	Title	Performance criteria
E1	Prepare to create game	6
E2	Evaluate capability of game-engine software and tools	4
E3	Prepare required assets for a game	4
E4	Use game-engine software and development tools	3
E5	Evaluate game prototype	6
E6	Transform prototype into final publication	5

This Training and Assessment Strategy is a DRAFT and must be reviewed and validated by the RTO before use in delivery.