

WORLDSKILLS SINGAPORE 2025
TECHNICAL DESCRIPTION
3D DIGITAL GAME ART



Skill Competition

1. This competition covers the creation of animated 3D game assets and exporting them to a game engine.
2. Conducted as an individual event, competitors are given 22 hours over 3 days to complete the Test Projects for this competition.
3. The competitor will be required to interpret the design brief, conceptualize and produce 2D concepts, create animated 3D game assets and export them to a game engine

Scope of Work

4. Competitors must be able to demonstrate competencies in the following areas:
 - 4.1. Organize and manage work
 - 4.2. Interpret the design brief
 - 4.3. Produce 2D digital concepts of the required assets for the game
 - 4.4. Produce 3D models
 - 4.5. Perform UV unwrapping
 - 4.6. Perform texturing
 - 4.7. Perform rigging and animation
 - 4.8. Perform Technical Art / Integrate into Game Engine

Assessment

5. Competitors will be assessed based on measurement (objective) and judgement (subjective) marking.
6. The assessment criteria and relative weighting of marks are as follows:

Criterion		Marks
A	Work organization and management	5
B	Interpretation of design brief	5
C	Concept art	13
D	3D Modelling	25
E	UV unwrapping	12
F	Texturing	13
G	Rigging and Animation	12
H	Technical Art / Game Engine	12
Total		100

The organisers reserve the right to update the Technical Description whenever necessary

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Major Tools & Materials

7. The following tools and materials will be used in the competition:

7.1. Installed Software

- a) Autodesk Entertainment Creation Suite Ultimate (3DS Max, Maya, Mudbox)
- b) Z-brush
- c) Blender
- d) Adobe Photoshop
- e) Adobe Illustrator
- f) Substance Painter
- g) Substance Designer
- h) Game engine – Unreal, Unity

7.2. Hardware

- a) Windows PC with dual monitor (without internet connection)
- b) Network server
- c) Tablet and stylus
- d) USB thumb drive

7.3. Available Resources/References

- a) Texture library, where appropriate.