



IMAGINATION TO REALITY

CATEGORY

SELECTION: TECHNICAL SPECIFICATION SHEET

BAKU 2025

Technical task sheet

1. General requirements

The project must be presented by participant teams in the form of a short video. The video should include the following main sections:

Video presentation:

Required sections:

- **Introduction:** Team information (team name, educational institution, country, and names of participants).
- **Design process:** Explanation of the stages the model went through from concept to design, including the software and approaches used.
- **Production process:** Application of CNC laser cutting technology and the stages of model preparation and assembly.
- **Final presentation:** Demonstration of the completed product, its functionality, and intended purpose.
- **Work process:** Footage showing real moments of collaboration among team members.
- **Video specifications:**

Specification	Requirements
Duration	The total length of the video presentation must not exceed 3 minutes
Quality	The video must be in at least 1080p HD quality to ensure clear visuals.
Format	Accepted file formats: .mp4, .mov, .avi.
Screen size (aspect ratio)	The video must be recorded and edited in a 16:9 ratio (standard widescreen)
Subtitles (optional)	Adding subtitles is recommended to ensure clear understanding of speech but is not mandatory.
Audio quality	The audio in the video should be clear, clean, and free from background noise. Microphone interference, ambient sounds, and music must not obstruct the understanding of the speech
Presentation style	Participants may use slides, live footage, animations, or a combination of these elements.
Visual sequence	Sections should be presented in a clear, logical order with distinct headings.
Editing	Participants may use music, text, transition effects, and visual enhancements; however, these should not overshadow the main content.
Submission method	The completed video must be uploaded to the YouTube platform, and the link should be submitted to the competition organizers.

2. Design and manufacturing requirements

- **Approved design software:** CorelDRAW, Fusion 360, Onshape, Tinkercad, Inkscape, etc.
- **Approved CNC laser cutting devices:** Laserbox Makeblock, Snapmaker A250, CNC-1090, CNC-6040, XTool, and other similar equipment with equivalent functionality.
- **Material requirements:**

Material type	Specifications
Primary materials	3 mm thick plywood, 3 mm thick acrylic (plexiglass), cardboard in suitable thickness for construction
Auxiliary materials	Adhesives (e.g., epoxy, PVA), paper, toothpicks, bamboo skewers, other non-electronic connecting materials Note: The use of electronic components or any elements powered by electricity is strictly prohibited.

Model dimensions:

- **Minimum size:** 30 cm
- **Maximum size:** 50 cm