# **Together We Print: SG60 Unity Challenge**

Uniting the nation to co-create meaningful 3D printed parts reflecting the SG60 spirit.

# **3D Printing Competition**

2025 Rules and Requirements

(Revision#0, Dated: 03-September 2025)

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### Welcome

We are pleased to announce the launch of a nationwide 3D Printing Competition as part of the SG60 celebrations, aimed at fostering intergenerational collaboration, creativity, and innovation. This competition will invite teams comprising at least one youth (age 35 and below) and one senior (age 60 and above) to co-create and submit 3D printed designs that reflect either one of "Singapore: Past, Present & Future," or "Singapore as a Green and Sustainable Nation".

Participants are encouraged to propose diverse ideas and designs showcasing how 3D-printed parts can enhance the lives of youths and seniors. This competition aims to bring generations together to celebrate SG60 through 3D printing, transforming memories into models, ideas into innovations, and individuals into partners in shaping Singapore's shared future.

### **About the Competition**

To participate in the competition:

- 1. Form a team of 2 to 4 members according to the team criteria.
- 2. Fill the Online Form to indicate your interest in joining. Please note that this step does *not* obligate you to submit an entry.
- 3. You are free to use any 3D printing technology and material. There are no size limits apart from the minimum size requirement.
- 4. Download and complete the submission form.
- 5. Submit your printed part along with the completed form in person at NTU. (We encourage you to type in your details rather than handwrite them to avoid discrepancies).
- 6. Digital participation certificates will be issued.
- 7. Winners will be announced on 7 November 2025 during the SC3DP Open House at NTU.
- 8. Your entry may be showcased for public viewing during the SC3DP Open House.

# Participation and Eligibility

Participating teams must consist of a minimum of 2 and maximum of 4 members, including at least:

- One team member must be a youth (age 35 and below, born in 1990 or later)
- One team member must be a senior (age 60 and above, born in 1965 or earlier)

#### **Please Note:**

The participants can be an immediate family member, neighbour, friend, teacher, or any willing person from the community.

All participants must be individuals who are residing, studying or working in Singapore.

#### Note:

- You may be part of different teams, with a maximum of one entry per competition theme.
- Select one of the competition themes, and your design should clearly reflect and align with the chosen theme.

One team member must be designated as the **primary contact person**. This individual will be the main point of contact with the organising committee throughout the competition. The following details of the participants must be provided on the submission form:

- Full name
- Age
- Contact number & email address

These details will be used strictly for competition-related communication and coordination.

### Let Your Design Take Shape

The only design constraint is a minimum 3D printed size of 100 mm x 100 mm x 100 mm. There is no maximum size limit; participants are free to determine this based on their design requirements.

Submission can take one or more of the following forms:

- A single 3D printed object.
- An assembly of multiple 3D printed components.
- A hybrid assembly incorporating a small number of commercially available standard parts.
- A single or muti colour print or multi material assembly.

**Please note:** The inclusion of non-printed parts will be subject to the discretion of the judging panel, who will assess their appropriateness within the context of the overall design.

Participants are permitted to engage 3D printing bureaus, either locally or internationally, to produce their parts. All associated costs shall be borne by the participants.

### **Submission Requirements**

Submissions must include:

- · Original 3D printed part or parts
- The 3D model in STL or STEP file format

Please rename your 3D model file (STL or STEP) using the format:

T1\_Team Name.ext or T2\_Team Name.ext, depending on your selected theme.

Please send by WeTransfer to: SC3DPoutreach@ntu.edu.sg

Please indicate in the description your name, contact number and competition theme selected.

Please send using the same email address that was provided in the submission form.

- A4 size poster (mandatory) with a clear description of the artwork in hardcopy.
- Optional video submission: You may submit a video to document your journey in this competition. Selected videos may be featured during our Open House.

Please name the video file as: Team Name\_T1.extension or Team Name\_T2.extension Please send by WeTransfer to: SC3DPoutreach@ntu.edu.sg

Please indicate in the description your name, contact number and competition theme selected.

- Note: All submitted designs must be the original work of the participant(s) and must not infringe on any third-party intellectual property rights. Entries found to be plagiarised will be disqualified.
- Video submission will not affect the judging criteria.

# **Judging Criteria**

All submitted entries will be evaluated by a panel of experts based on the following criteria:

- Relevance to the Theme 25%
  - How well does the design reflect the theme of the competition?
- Functionality and Practical Application 25%
  Is the design useful, purposeful or capable of solving real-world problems?
- Creativity and Originality 25%
  - How unique is the design?
- Innovation and Technical Complexity 25%

Does the design demonstrate inventive use of 3D printing? Are there technical elements that show a strong understanding of design and fabrication?

### **Ethics / Code of Conduct**

All participants are expected to uphold the highest standards of integrity and fairness throughout the competition. Strict adherence to the following rules is required:

- Originality: All designs must be the original work of the participant(s). Plagiarism, use of thirdparty designs without permission, or submission of Al-generated models without significant modification will result in immediate disqualification.
- Fair Play: Participants must engage in fair competition practices and respect others' work. Any attempts to undermine or sabotage other entries, including the use of unfair or prohibited means, will lead to disqualification.
- Ethical Conduct: Designs must adhere to ethical guidelines and not contain any offensive, harmful, or inappropriate content.
- Transparency: Participants must ensure that their submissions are complete, accurate, and free from manipulation. Misleading or false information in the submission form or entry files will result in disqualification.

By participating, entrants agree to comply with the rules and decisions of the organizing committee, and to foster a positive and respectful environment throughout the competition.

## **Ownership**

The organiser will retain the ownership of all entries and reserves the right to use and alter it in a manner deemed fit, without payment of any fee.

By entering the competition, participants grant the organising committee a non-exclusive, royalty-free license to:

- Display the designs and printed models during exhibitions, such as the SC3DP Open House and other events.
- Use images or representations of the designs for promotional, educational, and outreach purposes, both online and offline, with proper credit given to the creators.

Any commercial use or reproduction beyond these stated purposes will require explicit written consent from the original creators.

This policy ensures that participants' rights are respected while allowing their innovations to be showcased as part of Singapore's national celebration and commitment to creativity, sustainability, and intergenerational collaboration.

## **Participation Certificate**

All participants in this competition will receive a digital certificate, which will be emailed to the address provided.

To ensure accuracy, please ensure your name is entered correctly on the submission form. Note that it may take up to two months after the competition ends for certificates to be sent out. We recommend typing your details rather than handwriting them to avoid any discrepancies.

### **Awards Information**

The top three winners in each theme will be awarded cash prizes and a certificate of achievement. The awards ceremony will be held on **7 November** during the **SC3DP Open House** event at NTU

1st Prize: SGD3000 2nd Prize: SGD2000 3rd Prize: SGD1000

# **Packaging Guidelines**

To ensure your 3D printed part is submitted in good condition, please follow the suggested guidelines below for packaging and submission:

- 1. Protective Packaging
  - Use sturdy boxes or containers suitable for hand-carrying. Avoid flimsy materials.
  - Wrap parts in bubble wrap, foam, or soft padding to protect against shocks, vibrations, or scratches during transit.
  - If the part is fragile or has fine features, consider using compartmentalised boxes or 3D-printed part supports for added protection.

#### 2. Labelling

- Label each package clearly with:
  - Team/Participant Name & Contact number
  - o Competition Theme
  - Part Orientation (Top/Front)
- Affix a "Fragile" label if necessary.
- 3. Submission Form
  - Include a printed copy of the submission form while submitting the printed parts.
- 4. Clean and Finish
  - Ensure your part is:

- o Clean (free from dust, support residue, oils, or debris)
- Dry (especially if made from hygroscopic materials)
- o If post-processed, ensure coatings/paints are fully cured before packing.

### 5. Avoid These

- Do not use loose fill (e.g., Styrofoam peanuts) that can stick to or damage prints.
- Do not use excessive tape that makes it hard to unbox.
- Do not include any hazardous or sharp items.
- 6. Avoid shipping the printed parts by courier or any other means.

### **Contact Information**

Nanyang Technological University Singapore Centre for 3D Printing Block N3.1-B2c-03 65 Nanyang Drive Singapore 637460

Email: SC3DPoutreach@ntu.edu.sg

Location of our Singapore Centre for 3D Printing (SC3DP) office.

