



中国（国际）3D打印创意设计大赛
International 3D Printing & Design Competition

2020

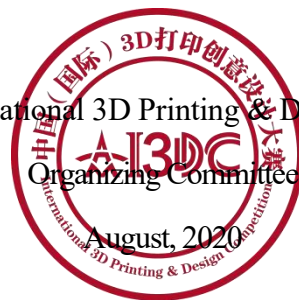
The 5th International 3D Printing and Design Competition

The Final Competition Rules and Guidance

International 3D Printing & Design Competition

Organizing Committee

August, 2020



1. Final Competition Description

The subject of 2020 5th China (International) 3D Printing and Design Competition in (2020 I3DC) is closely related to daily life and focuses on hot topics. "Fighting against COVID-19" is the topic for Youth and Teens, Vocational School Divisions. With the concept of Chinese and foreign cultural integration and innovation, the theme for University Division is to use 3D printing to realize the harmonious coexistence of diverse cultures. The topic for the Professional Divisions is to optimize design of a typical structural part of aircraft.

After nearly four months of intensive organization, the Organizing Committee received more than 200 entries from home and abroad. The Organizing Committee has finished Preliminary Review, 20 outstanding works of each division are selected to enter the Final Competition.

2. Final Competition Time, Place and Schedule

(1) Final Competition Time

23rd -25th September, 2020.

(2) Final Competition Schedule

	23 rd , September		24 th , September	25 th , September
Youth and Teens Division	Presentation and Defense		/	Awards Ceremony
Vocational School Division	Online Design	Presentation and Defense	/	
University Students Division	Live Presentation		Attend Forums and Visit IAME	
Professional Division	Attend Forums and Visit IAME		Field Test Verification and Live Presentation	

Note: 2020 International Additive Manufacturing Expo , the High-end Forum of International Engineering Science and Technology Development Strategy for Additive Manufacturing and New Generation Technology, a series of Sub-forums of Additive Manufacturing Technology and high end manufacturing equipment will be held at the same time and venue, the. The Finalists is free to attend and visit the exhibition with the Entry Certificate when there is no competition arrangement.

(3) Final Competition Place

The Presentation area is arranged in the conference hall of Xi 'an Hi-tech International Conference Center (for details, see 2020IAME conference publication or on-site description board or signboard). The test and verification site of the professional group is in the Testing Center of the National Additive Manufacturing Innovation Center.

(4) Final Competition Form and Platform

In order to meet the requirements of the "regular epidemic prevention and control" mechanism, Final Competition of the 2020 I3DC for Youth and Teens, Vocational School Division will be online, the platform will be the APP "Tencent Conference". The University Division will be "Online+Offline" and Professional Division will be offline.

3. Final Competition Group

For Finalist Lists in Chinese version, please see the official account “全国增材制造（3D打印）产业技术创新战略联盟” or the official account “IAME西安国际3D打印博览会”. English version of Finalist Announcement for University Division is also published at NIIAM website page:

<http://www.niiam.com/news/i3dc/260>.

4. Final Competition Rules for Youth and Teens Division

(1) Final Competition Form

The Final Competition is an Online competition, in the form of online presentation and defense.

(2) Final Competition Schedule

Date	Time (Bejing Time)	Activities	Remarks
22 nd , September 2020	8:00-9:00	The finalists confirm their identity, test the platform/equipment and wait for announcement of the order of defense.	The order of defense shall be decided by drawing lots from the competition committee.
23 rd , September 2020	8:00-13:00	Online presentation defense (12min/ Team), 8 minutes for presenting and demonstrating the work and 4 minute for answering the questions raised by the Judge Panels.	
25 th , September 2020	12:00-13:00	Awarding Ceremony	The winning team will be announced on the site.

(3) Preparation before Competition

1) Final Competition Platform: Tencent Meeting (International version), VooV Meeting. Download address:

<https://voovmeeting.com/df/zh-CN/download-center.html?from=1001>

2) The Finalists shall confirm identity online team by team first. After confirmation of the identification, Finalists can enter the meeting and wait for beginning of the Competition.

3) Defense Preparation: The Final Competition defense presentation shall be based on the preliminary work. The Finalist Team shall prepare a Power Point for defense and print their work in advance. The Power Point file of defense should be submitted to i3dc_qsn@163.com before 18th, September, 2020. It is recommended to use Microsoft Office 2013 and above version. The following contents shall be presented in the defense:

- **Statement:** introduce the creative ideas of design, realization form of work design and technique, reveal its innovation points and practical value, etc.;
- **Presentation:** present the work and show its working status, introduce the working principle, practical functions, etc.;
- **Defense:** After the completion of the presentation, the finalists will have about 4 minutes to answer the judge panel's questions.

(4) Selection of Final Award Winners

Final Competition Score= Score for presentation of works + Score for defense. The presentation score accounts for 55% of the Final Competition result of the Finalists, and the defense score accounts for 45% of the Final Competition result of the Finalists.

Evaluation Indicators		Indicator Description	The Final Competition Score
The Presentation of the Entries	Creativity	The work is original and creative. It does not copy ideas from any other existing work.	18
	Practicability	The work is practical and could be used to solve practical problems.	15
	Technology	The work demonstrates a reasonable and highly sophisticated project. It is designed effectively to take advantage of 3D printing technology and highlight the characteristics of additive manufacturing, also combine with open source hardware.	14
	Functionality	The work must be complete. It can fully reflect the design concept and function well.	5
	Aesthetics	The work should have a reasonable structure, harmonious color and a beautiful appearance.	3
Presentation		Finalists are able to express the idea clearly and organize the contents logically.	45

The Organizing Committee will calculate the Final Competition scores according to the scores given by the judges in the form of average scores. The winners list will be announced at the Awarding Ceremony.

5. University Students Division Final Competition Rules

(1) Final Competition Form

The Final Competition for this division will be an online +offline competition. Participants with Chinese nationality and who are in China will do presentations and defenses in Xi'an on site, while those with foreign nationality who are not in China will do presentations and their defenses online. Finalists are required to optimize the design based on their preliminary work, print the work through any form of 3D printing technology, and present their work with the Power Point and real work.

Finalists are required to compare or explain the optimized design part in the Power Point document, to reflect the commerciality of the work. In addition to demonstrating the practical value and solving specific practical problems through testing the functions of the product, it is also necessary to analyze the differences between the designed product and existing products in the market, reflect the advantages of 3D printing and demonstrate the market prospect of the product.

(2) Final Competition Schedule

Date	Time (Beijing Time)	Activities	Remarks
22 nd , September 2020	17:00-18:00	Offline (Chinese Finalists) :Sign in, get familiar with the spot;	The order of defense shall be determined by drawing lots. The order of drawing shall be determined by the order of signing in.
23 rd , September 2020	9:00-12:00	Offline: Sign in and do the presentation and defense on the spot. (15min/ team)	The first 10 minutes are for presentation and demonstration of the work, later 5 minutes answer the questions raised by the judges.
23 rd , September 2020	15:00-17:00	Online: online finals platform testing; Present in order. Each Team Present and defense 15 minutes. 10 minutes for presentation and demonstration of the work, 5 minutes for answering the questions raised by the judge panel.	The order of defense shall be decided after communication with each Finalists Team.
25 th , September 2020	12:00-13:00	Awarding Ceremony	The winning team will be announced on the site on the closing ceremony of 2020IAME

(3) Preparation before Competition

- **Proof of Identity (Offline):** The team shall sign in and confirm identity Team by Team using student ID card or ID card (subject to the registration information).

- **Proof of Identity (Online):** Final Competition Platform is Tencent Meeting (International version), VooV Meeting. The download address : <https://voovmeeting.com/df/zh-CN/download-center.html?from=1001>.

The Finalists shall confirm identity online team by team first. After confirmation of the identification, Finalists can enter the meeting and wait for beginning of the Competition.

- **Defense Preparation:** The Final Competition defense presentation shall be based on the preliminary work. The participating teams shall prepare the Power Point of defense and print the real work in advance. The defense language requirement is unified as English. The Power Point file of defense should be submitted to i3dc_qsn@163.com before 18th, September, 2020. It is recommended to use Microsoft Office 2013 and above version. The real works shall be printed by the Finalists themselves and presented at the Final Competition (online or offline).

During the presentation of Power Point and real works, the participants will present their presentations in less than 10 minutes from the aspects of creative design concept, analysis of manufacturing technical advantages, practicability and market prospect, etc., and then give a 5-minute defense according to questions from the judges.

(4) Selection of Final Award Winners

Final Competition results = the judges score of live or online work presentation,

explanation and defense.

Evaluation indicators		Indicator description	Score
The Presentation of the Entries	Creativity	The finalists shall present the parts of the re-optimization or redesign compared to the preliminary entries.	25
	Technology	The work demonstrates a reasonable and highly sophisticated project. It is designed effectively to take advantage of 3D printing technology and highlight the characteristics of additive manufacturing.	20
	Practicability and Commerciality	The work is practical and could be used to solve practical problems, and can achieve functions consistent with the design theme. By analyzing the differences between the designed products and existing products in the market, the advantages and applications of 3D printing are reflected, and the market prospects of the products are demonstrated.	20
	Functionality	The work must be complete. It can fully reflect the design concept and function well.	10
	Aesthetics	The work should have a reasonable structure, harmonious color and a beautiful appearance.	10
Presentation		Be able to express the idea clearly and organize the contents logically.	15

According to the participants' performance during presentation and defense, the judge panel will judge according to the above scoring standards. The Organizing Committee will calculate the Final Competition scores according to the scores given by the judges in the form of average scores, and announce the winners list at the award ceremony.

6. Calculation of the Total Score of the Competition

Final Competition result of each division equals the overall result of the competition

7. Prize

(1) Gold/Silver/ Bronze Award

Award	Note	Number	Prize
Gold Award	Award Division by Division according to the Final Competition Score.	1 team	Award certificate + 5,000 RMB/team + 1 set of MagicNote Portable 3D printer (professional version) + 2 years free use of IME3D software (Youth and Teens Division) /1 year free use of Autodesk Inventor software (Vocational Education Section)
Silver Award	Award Division by Division according to the Final Competition Score.	2 teams	Award certificate + 3,000 RMB/team + 1 set of MagicNote Portable 3D printer (professional version) + 2 years free use of IME3D KID software (Youth and Teens Division)
Bronze Award	Award Division by Division according to the Final Competition Score.	4 teams	Award certificate + 2,000 RMB/team + 1 set of MagicNote Portable 3D printer(standard version)

(2) Excellent Team Award

Award	Note	Number	Prize
Best Culture Fusion Award	According to the content of the works, team performance and so on, nominated and selected by the Judge Panel.	1 team	Award certificate + 1 set of MagicNote Portable 3D printer(standard version)
The Excellent Award		1 team	Award certificate + 1 set of MagicNote Portable 3D printer(standard version)

(3) The Title of Excellent Advisor

"Excellent Advisor" award will be awarded to the advisor of the Gold, Silver and Bronze award teams with a Certificate.

(4) Description of Selection and Awards

1) Prizes shall be awarded to Finalists Team by Team, and all prizes shall not be repeated;

2) If Finalists Team qualified for the Final Competition failing to attend the Final Competition on site or online, will be regarded as abstaining and will not be awarded.

3) In the process of selection, if the total score of the Competition is the same and the result of joint ranking is formed, the number of this award will increase, while the number of the latter award will decrease accordingly. For example, if the Silver Award has 3 teams, the Bronze Award will select only 3 teams following the rank.

4) If the Prize is in the form of bonus, the Prize amount shall be the pre-tax amount.

8. Awarding Ceremony

The Organizing Committee will hold a awarding ceremony in Xi 'an Hi-tech International Convention Center from 12:00 to 13:00 on 25th, September, 2020 (see the 2020IAME conference catalogue or the on-site directory board for details). Award certificates and prizes for University Students, Professional Division will be issued on the spot (Prize for Finalists outside China of University Division, the finalists for Youth and Teens, Vocational School Division will be arranged after the Competition). If prizes are awarded in the form of bonus, the prize will be transferred to the account of designated by the team.

9. Fees

The competition is free of charge. Transportation, accommodation and catering expenses incurred during the Final Competition shall be borne by the Finalists. The Organizing Committee will arrange a shuttle bus from Crystal Island Hotel (No. 38, South Section of Fenghui South Road, Gaoxin District, Xi 'an) and QueenSir International Hotel (Building 19, No. 1, Zhangba North Road, Yanta District, Xi 'an) to Xi 'an Hi-tech International Conference Center in the morning and evening of 23rd -25th, September, 2020.

10. Other Instructions

1) Due to the influence of COVID-19, our Competition Rules and Guidance has to be changed, if there are any differences or incompliance with respect to selection of Final Ward Winners, prizes and other aspects regarding to the Final Competition, please follow this Rule and Guidance.

The Final Competition shall be held in strict accordance with the rules and requirements illustrated herewith.

2) For Offline Competition, it is suggested that the finalists should come to Xi 'an one day in advance to familiarize themselves with the venue environment and route arrangement.

3) During the competition, without the approval of 2020 I3DC Organizing Committee, any Finalists shall not accept interviews related to the content of the competition conducted by other organizations or individuals. Violators shall be disqualified.

4) No Finalist is allowed to publish any information about the competition without permission.

5) The team, team leader or instructor violate the rules of the competition

and still go their own way despite the reminding and persuade of the 2020 I3DC Organizing Committee, and the team will be disqualified.

6) 2020 I3DC Organizing Committee shall be responsible for the explanation or decision of other matters not stated here or in case of any emergencies.

11. Contacts

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University Students Division(Outside China): i3dc@niam.cn

Professional Division: Ma Limin 18910565757