

# **World University Students' Bridge Design Competition 2022**

## **1 . Introduction**

The World University Students' Bridge Design Competition 2022 is a competition that challenges the students to develop a practical bridge design project. It helps the students grow their interpersonal and professional skills, encourages innovations and fosters practical and inter-disciplinary talents.

## **2 . Missions**

Guiding teachers to enhance focus on students' sense of innovation, integrated design capability as well as spirit of teamwork while teaching.

Developing students' practical skills and helping them build a bridge between the engineering principles and real world of the bridge engineering.

Attracting and encouraging more students to actively participate in science and technology activities that provide opportunities to exhibit their talents.

Providing a platform to cultivate a talented pool of bridge professionals.

## **3 . Organizers**

China Highway & Transportation Society (CHTS)

CCCC Highway Consultants Co., Ltd (HPDI)

## **4 . Bridge Requirements**

The bridge is to span valleys, rivers, lakes and seas, or other places with typical topographic features.

The bridge location's terrain, geography, climate, weather, hydrology, geology, seismic features, impact, temperature, loads etc and technical standards for design are decided by the designers themselves and to be detailed together with adopted parameters in the design proposal and notes.

The total bridge length shall be between 50 and 5,000 meters with minimum span length no less than 20 meters, and bridge width between 4 and 50 meters.

The bridge type may be Suspension Bridge, Cable-stayed Bridge, Arch Bridge, and Girder Bridge, Composite, Hybrid-system Bridge and New Concept or Future Bridge etc.

## **5 . How to participate in the Competition**

### 5.1 Audience For This Competition

The university/college students.

### 5.2 Participation Requirements

A team or individuals.

The design must be sealed/stamped by university (department) of each team member, if any.

The project team can be formed by different schools and disciplines with members no greater than 5.

The Maximum two advisors, who are university employees, are allowed for one project.

### 5.3 Entry's Official Submission

*Complete Application Form for 2022 World University Students' Bridge Design Competition and Design Notes for 2022 World University Students' Bridge Design Competition.*

Entries should only be submitted in electronic format, form a compressed package, and send it to the designated email address.

There is no limit to the number of entries submitted by each participant. Each entry must be sent in a separate compressed packet.

The language of the entry is English or Chinese.

The entries will not be returned after submission and the designers should keep the manuscripts by themselves.

### 5.4 Key Dates

The deadline for entry submission is May 10, 2022.

### 5.5 Legal Issues

Copyright of the work belongs to the designer(s).

## **6 . Awards**

There will be prizes for special, first, second, third place and excellence award prize, as well as excellent instructor and outstanding organization awards.

The reward ranges from RMB 2,000 to RMB 30,000. The organization committee will organize a review committee to conduct comprehensive review and evaluation for the

entries in terms of the design purpose, concept, effect, and value etc.

There are two evaluation stages, preliminary and final evaluations in entry review.

### 6.1 Preliminary Review

The preliminary evaluation is in the form of the expert meeting.

The scoring is based on the 100-point system, which include design concept and environmental harmony (40 points), bridge structure system (30 points), design drawings, introduction to project and renderings (30 points). The scoring is classified as outstanding, good, pass, and fail.

### 6.2 Final Evaluation

The projects with top 10 scores are selected for final competition. Contestants will present their works (6 minutes), answer the questions (5 minutes). The judges will score each portion and select 1 special prize, 3 first prize and 6 second prize based on the scoring of each project.

The live finals will be held on a 10-point scale. The basic score is 8 points, and the other 2 score criteria are: whether the site introduction is highlighted and clear (1 point), and whether the site answer is concise, reasonable and accurate (1 point). The score is the sum of the base score 8 points and the field score with 2 decimal. If the identical scores occur, the expert group shall further review the projects and vote for a resolution, and the majority of votes shall prevail.

### 6.3 Award

The Final will be held in June of 2022. Detailed time and place will be announced separately.

For those top 10 final winning projects from abroad, the organizing committee will provide the flights to China for two people, and accommodation for two days (one student and one teacher) to participate in the final competition. The participants shall pay accommodation for any extra days they stay.

## 7. Contacts

Please contact the undersigned for details:

**Tel:** +86-10 6428-8790

**Email:** [gonglukepu@163.com](mailto:gonglukepu@163.com)

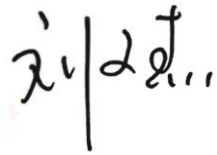
Welcome to join the QQ group chat with ID of **255068693** for more information and please send a question and submit the softcopy to the email: [gonglukepu@163.com](mailto:gonglukepu@163.com).

**Annexure:**

01:Application Form for 2022 World University Students' Bridge Design Competition

02:Design Notes for 2022 World University Students' Bridge Design Competition

Secretary –General :

A handwritten signature in black ink, appearing to be 'S. S. S.', written in a cursive style.

November 30, 2021

**Annexure 01**

**Application Form for 2022 World University Students'  
Bridge Design Competition**

**Entry name**

**Students**

Name :

Nationality :

University :

Educational Background :

Mobile :

Email :

**Advisors**

Name :

Nationality :

University :

Position/Title :

Mobile :

Email :

## **Annexure 02**

### **Design Notes for 2022 World University Students' Bridge Design Competition**

The design concept shall adhere to the idea of being safe, applicable, durable, aesthetic, friendly to environment, energy-saving, easy for construction, management and maintenance and for each design, no less than 3 concepts are to be embedded in. Description of environment adoptability, applicability, distinguishing features, difficulties, innovations etc. No more than 15,000 words.

The design drawing shall include the design scheme, calculation book, Main Structure Drawing, construction scheme, etc. Drawings no more than 10 pages, submitted in jpg format.

Renderings should be no more than 5 pages, submitted in jpg format.

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