



CTBUH 2021 Student Tall Building Design Competition

Competition Brief

The Council on Tall Buildings and Urban Habitat (CTBUH) is pleased to announce its 10th Student Tall Building Design Competition. The goal of the competition is to shed new light on the meaning and value of tall buildings in modern society.

The age of the tall building as a single iconic piece of sculpture, standing in isolation from its surroundings, is coming to an end. Designers have a responsibility to ensure that these permanent urban structures engender a future-oriented urban response to the greatest challenges of our time: unprecedented population growth; mass urbanization; climate change; environmental degradation; social, political and economic change; and the rapid advance of myriad technical innovations.

The future of humanity on this planet relies on the collective benefits of urban density; reducing both land consumption and the energy needed to construct and operate the horizontally dispersed city. Tall buildings must now be the vehicles for creating increased density not just through sheer height, but by connecting multiple layers of the city. Physical urban infrastructure, circulation, greenery, and urban functions traditionally restricted to the ground level would all, ideally, continue up and into the building, such that the buildings themselves become an extension of the city: a part of the two-dimensional horizontal urban plane flipped vertical.

Participants are free to site their projects anywhere in the world. But this is not to undervalue the importance of site – participants should carefully consider their site (which must be a “real” site, in an existing urban location) as the site context should inherently have significant influence over the project’s design. Participants are also free to determine the size, height, function, accommodation and responsibilities of the building. The intention is these freedoms on site and program will maximize the diversity and creativity of the responses. It is also intended to allow students from specific high-rise educational studies around the world during the 2020–21 academic year to submit their projects for consideration.

Participants should engage with the exploration and resolution of the synergistic relationship between a tall building and its urban setting; how that tall building can be inspired by the cultural, physical, and environmental aspects of its site; how the program of the building is influenced by the micro and macro site/urban conditions; and how the building responds to global issues. Proposals should show evidence of a clear understanding of how considerations of structure, environment, servicing, etc. are as vital to the success of a tall building as the form, materials, aesthetics, etc.

Participants need to also consider the CTBUH Criteria for defining tall buildings, such that “at least 50 percent of its height is occupied by usable floor area,” (i.e., proposals should be functional “buildings” not simply observation, communication, or other towers).

Some of the multi-layered elements that participants should take into consideration may include (in no particular hierarchy):

- local climate
- urban grain
- neighboring buildings
- city requirements
- community requirements
- social sustainability
- environmental sustainability
- efficiency of materials, space, and usage
- aesthetics
- proportions
- local, social, and cultural conditions
- materiality
- new technologies
- structure
- innovative program/functionality
- adaptability
- transit/mobility
- infrastructure
- etc.

Participation Requirements

- The competition is open to all students who are registered at a University level. For recently graduated students: you must have been a registered student during the Fall 2020 term, i.e., August–December 2020 or later.
- Entries to the CTBUH competition must be original works by the students and can not have been submitted to any previous design competition. Students may work under the guidance of a faculty adviser if they so choose.
- The official language of the competition is English.
- Participation in this competition is anonymous. You will be issued a registration number which will serve as the only means of identification during the entire judging process.
- Contact between participants and members of the jury is prohibited.
- Ten “Finalists” will be selected to virtually present their schemes to the second-round jury, which will then select the winning projects. Online participation to the jury is required as a condition of being awarded “Finalist” status and receiving the award. Finalist teams that do not participate will be ineligible for prizes.
- Copyright and intellectual rights of the submissions remain with the original authors. Successful participants in the CTBUH Student Design Competition agree to allow CTBUH to display their work at the CTBUH Conference; display images and a text description of their work on the CTBUH website at **CTBUH.org**, and use an image of their work in promotional material for future CTBUH competitions.

Prizes

- **First Place: US\$3,000 Cash Prize**
- **Second Place: US\$2,000 Cash Prize**
- **Third Place: US\$1,000 Cash Prize**
- **Fourth Place: US\$1,000 Cash Prize**
- **Fifth Place: US\$1,000 Cash Prize**

Key Dates

- Monday, 20 April: Competition formally launched
- Monday, 19 July: Registration deadline
- Monday, 26 July: Submission deadline
- Friday, 24 September: Finalists notified
- Early October: Top-ten Finalists will present to the jury at the virtual event (exact dates to be announced)
- Mid October: Winners are announced

Registration

- All university students are invited to participate in the design competition. Multidisciplinary teams are strongly encouraged.
- Teams can be made up of one to five individuals.
- Only one single project can be submitted by any one individual/team.
- Students cannot participate in more than one team.
- If a team chooses to work under the guidance of a faculty advisor, they must provide his/her name when registering. While students cannot participate on more than one team, a faculty member is eligible to advise multiple teams.
- **Participants must register online at <http://competition.ctbuh.org> by July 19, 2021.**
- All team members must submit proof of student status when they register. A scanned copy of a student ID or other form of verification for each member of the team must be uploaded to the registration site in order to successfully complete the registration.
- After your registration and student status has been approved, the CTBUH will issue you a unique registration number which will be necessary for the final submission.
- **There are no registration fees. Participation in the CTBUH Competition is free.**

Submission Requirements

Submissions will be digital only; no hard copies will be required or accepted. **Participants must submit their project no later than July 26, 2021.** Access to upload your submission will be provided to you by email after you have successfully completed the registration process. **Please be sure to set your email to accept all correspondence from CTBUH email accounts to ensure you do not miss any important information.**

Project submissions are limited to the following two files (both files are required):

- **One A1 board**
 - This primarily visual presentation of your project should include the following: the name/title of your project, the project concept, diagrams, plans, sections, and perspectives. However, it is up to each individual team to determine what information is needed to communicate their project most effectively to the judges.
 - The board must be ISO A1 (841mm x 594mm) in size and oriented to the **LANDSCAPE** (i.e., horizontal) format.
 - The board must be saved as a PDF file of high visual resolution, however the file size should not exceed 20MB.
 - Entry must include your unique registration number in the upper right corner of the board. There should **NOT** be any personal names, affiliations, or any other forms of identification on the board.
 - The file name must include your four-digit registration number and conform to the following naming convention:
CTBUH2021_XXXX.pdf
- **One DOC file written description (A4 one-page)**
 - This one-page written description is your opportunity to further describe your project's concept, design, motivations, etc.
 - Please include the name/title of your project at the top of the document.
 - Text should be a maximum of 500 words, and is not to exceed one page.
 - There should **NOT** be any personal names, affiliations or any other forms of identification in the text.
 - The file name must include your four-digit registration number and conform to the following naming convention:
CTBUH2021_XXXX_Description.doc
- Only these two files (one .pdf and one .doc) will be accepted. No additional files will be accepted. Supplemental files (.ppt, .mov, etc.) or files that do not conform to the above listed specifications will be discarded and not reviewed by the jury.
- The top five projects selected as "Finalists" will elect one team member to present the project during the CTBUH 2021 Student Design Competition Virtual Event. This will include an 8-minute oral presentation (supported by a PowerPoint presentation), followed by an 5-minute question and answer session with the jury. **Attendance to the online event to present is mandatory. "Finalist" teams that fail to send representation to the online event will be ineligible for the prizes.**

Jury

The competition consists of two juries. The first-round jury will narrow the submissions down to 10 Finalists. The second-round jury will then select the winners from the Finalists. The members of the second-round jury will consist of prominent professionals, creating an international, multi-disciplinary group of tall building experts.

Judging Criteria

To assist with the judging process, a series of judging criteria is defined in four categories as outlined below. Participants are strongly encouraged to keep these criteria in mind throughout the design process.

■ Creative Approach (25 percent):

- The design response is innovative and inspirational.
- The design response shows originality and creative thinking in terms of high-rise design and the future evolution of the skyscraper.
- The building program is creative, yet clear and justified.

■ Response to Site (25 percent):

- The design responds to the physical/cultural aspects of its site, such that the design is unique to its location, and not a generic response to a tall building capable of being reproduced regardless of its location.
- The design responds to the environmental aspects of its site.

■ Sustainability (25 percent):

- The design considers the building's environmental impact and energy usage.
- The design considers efficiency throughout (core, shell, space, usage, etc.).
- The design considers social sustainability, occupant lifestyle, and well-being.

■ Functionality (25 percent):

- Planning and building organization is clear and appropriate.
- There is a clear structural, technical, and constructional rationale.

Judges will also consider the CTBUH Criteria defining a tall building as "at least 50 percent of its height being occupied by usable floor area," i.e., proposals should be functional "buildings" not simply observation, communication, or other towers. **Proposals that do not meet this minimum requirement will be disqualified by the jury.**

For more information on all CTBUH Height Criteria and tall building definitions visit here:
CTBUH.org/criteria

About CTBUH

The Council on Tall Buildings and Urban Habitat (CTBUH) is the world's leading resource for professionals focused on the inception, design, construction, and operation of tall buildings and future cities. Founded in 1969 and headquartered at Chicago's historic Monroe Building, the CTBUH is a not-for-profit organization with an Asia Headquarters office at Tongji University, Shanghai; a Research Office at Luav University, Venice, Italy; and an Academic Office at the Illinois Institute of Technology, Chicago. CTBUH facilitates the exchange of the latest knowledge available on tall buildings around the world through publications, research, events, working groups, web resources, and its extensive network of international representatives. The Council's research department is spearheading the investigation of the next generation of tall buildings by aiding original research on sustainability and key development issues. The Council's free database on tall buildings, The Skyscraper Center, is updated daily with detailed information, images, data, and news. The CTBUH also developed the international standards for measuring tall building height and is recognized as the arbiter for bestowing such designations as "The World's Tallest Building."

CTBUH.org