



2023 CTBUH International Student Tall Building Design Competition

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Competition Brief

The Council on Tall Buildings and Urban Habitat (CTBUH) is pleased to announce its 12th International 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.

This year's competition focuses on **Humanizing High Density – People, Nature & the Urban Realm**, the theme of the CTBUH 2023 International Conference, to explore how high-density urbanization can support healthy living, working, and civic and social engagement and discuss solutions for livable shapes of density; equity in housing; creating better social spaces; finding balance with nature; reducing carbon emissions; mitigating the effects of climate change; and striking a balance in development that is appropriate for local environmental and cultural conditions.

Participants are free to locate their projects anywhere in the world. But this is not to undervalue the importance of site – participants should carefully consider how their site (which must be a “real” site, in an existing urban location) influences the project's design. Participants are also free to determine the size, height, function, accommodation, and responsibilities of the building. The intention with freedom of site and program selection is to 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 2021–22 and 2022–23 academic years 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.

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 2022–23 academic year, or later.
- Entries to the CTBUH competition must be original works by the students and cannot 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.
- Five “Finalists” will be selected to present their schemes to the jury at the CTBUH 2023 Conference. Participation in the event and presentation to the jury are required as a condition of being awarded finalist status and receiving the award (a travel stipend is provided for one representative per team, see below). Finalist teams that do not attend 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 and AECOM to display their work in any forum or publication, physical or digital.

Prizes

- **First Place:** US\$6,000
US\$3,000 cash + stipend to attend CTBUH 2023 Conference (up to US\$3,000 value*)
- **Second Place:** US\$5,000
US\$2,000 cash + stipend to attend CTBUH 2023 Conference (up to US\$3,000 value*)
- **Third Place:** US\$4,000
US\$1,000 cash + stipend to attend CTBUH 2023 Conference (up to US\$3,000 value*)
- **Fourth Place:** US\$3,000
Stipend to attend CTBUH 2023 Conference (up to US\$3,000 value*)
- **Fifth Place:** US\$3,000
Stipend to attend CTBUH 2023 Conference (up to US\$3,000 value*)
- **Honorable Mentions**
A select number of additional entries may be recognized as Honorable Mentions and awarded with a certificate.
- **Exhibition**
A poster exhibition of the five “Finalists” and a selected number of “Semi-finalist” entries will be exhibited during the CTBUH 2023 Conference.

A stipend will be provided to send one representative from each of the five “Finalists” teams to the CTBUH 2023 Conference to present their project to the jury in order to determine the 1st through 5th place awards. The stipend includes complimentary Conference registration (value US\$1,000) + travel/accommodation costs (up to US\$2,000). Please note that the registration stipend is for Day 2 & 3 Core Conference in Singapore ONLY. Finalists may register for the remainder of the conference including the Day 4, Day 5 & 6 Programs with any remaining funds in their travel stipend or their own funding.

Key Dates

- 24 April 2023: Competition formally launched
- 19 June 2023: Registration deadline
- 26 June 2023: Submission deadline
- 25 July 2023: Top-five finalists notified
- October 2023: Top-five finalists will present to the jury at the CTBUH 2023 Conference. Winners will be announced during the Conference.

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 www.ctbuh.org/studentdesignsubmission by June 19, 2023.**
- 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, 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 June 26, 2023.** 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 three-digit registration number and conform to the following naming convention:
CTBUH2023_XXX.pdf
- **One DOC file written description (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 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 three-digit registration number and conform to the following naming convention:
CTBUH2023_XXX_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 2023 Conference. This will include an 8-minute oral presentation (supported by a PowerPoint presentation), followed by a 5-minute Question and Answer session with the jury. **Attendance at the Conference presentation is mandatory. "Finalist" teams that fail to send representation to the Conference will be ineligible for the prizes.**

Jury

The competition consists of two juries. The first-round jury will narrow the submissions down to 25 semi-finalists. The second-round jury will then select the five finalists from the semi-finalists. The members of the second-round jury will consist of prominent professionals involved in the CTBUH 2023 Conference, creating an international, multi-disciplinary group of tall building experts. The final jury selection announcement will be made closer to the start of the CTBUH 2023 Conference.

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 produce 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% 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: www.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 Iuav 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." See more at ctbuh.org

About AECOM

AECOM is the world's trusted infrastructure consulting firm, delivering professional services throughout the project lifecycle – from advisory, planning, design and engineering to program and construction management. On projects spanning transportation, buildings, water, new energy and the environment, our public- and private-sector clients trust us to solve their most complex challenges. Our teams are driven by a common purpose to deliver a better world through our unrivaled technical and digital expertise, a culture of equity, diversity and inclusion, and a commitment to environmental, social and governance priorities. AECOM is a Fortune 500 firm and its Professional Services business had revenue of \$13.1 billion in fiscal year 2022. AECOM's fields of expertise include Building Automation Control Systems; Construction / Contractor; Cost Consulting; Engineering, Multi-discipline; Environmental Engineering; Environmental Protection; Landscape Architecture; Mechanical, Electrical & Plumbing; Project Management; Structural Engineering; and Transportation / Urban Infrastructure; Urban Design. See more at aecom.com