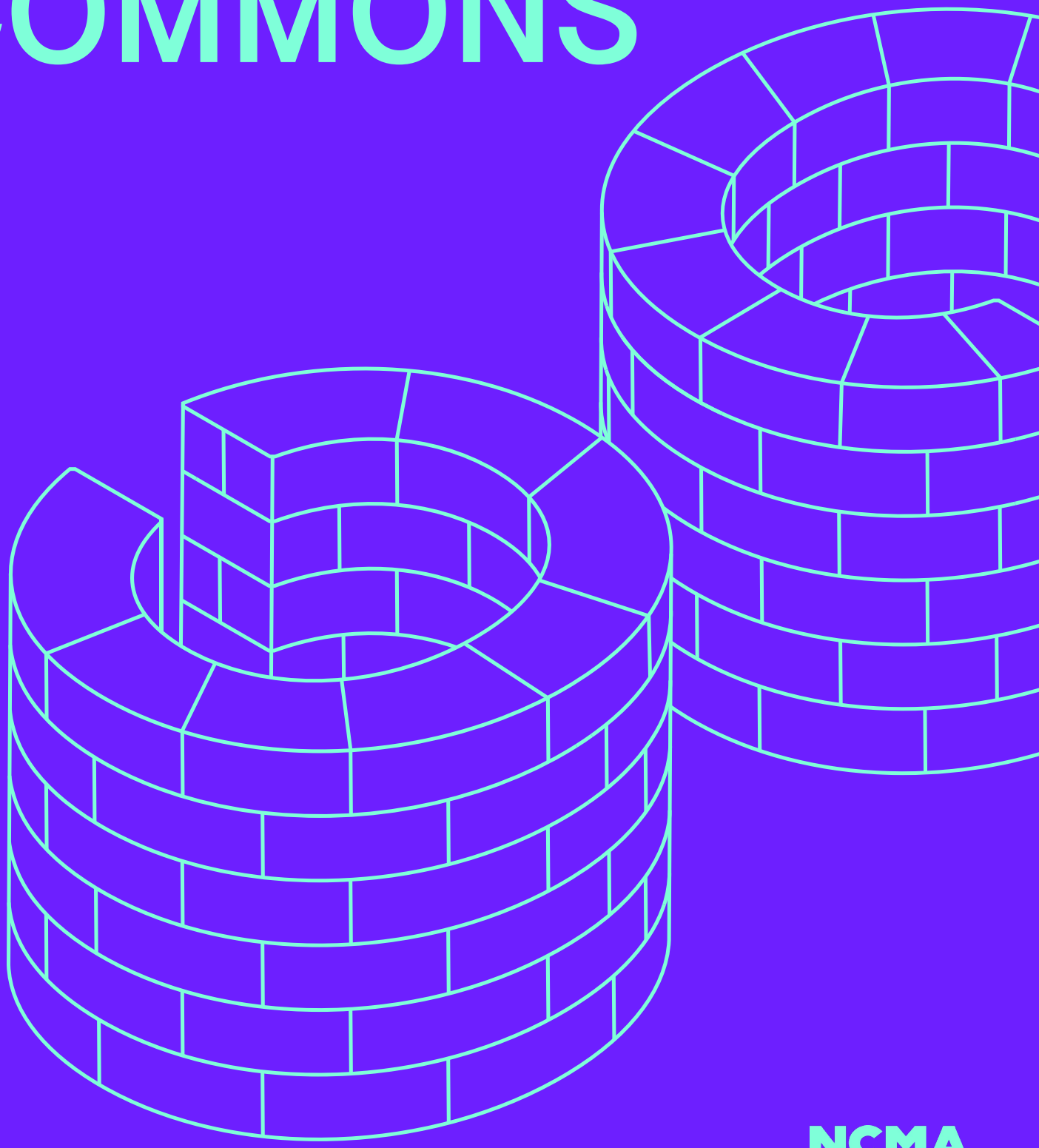
2023 CONCRETE MASONRY DESIGN COMPETITION

COMMUNITY COMMONS



SUBMISSION DEADLINE
JUNE 7, 2023

SPONSORED BY NCMA FDN
EDUCATION & RESEARCH FOUNDATION

2023 Concrete Masonry Design Student Competition

INTRODUCTION
The Association of Collegiate Schools of Architecture (ACSA) is pleased to announce the **Concrete Masonry Design Competition** for the 2022-2023 academic year. The competition is a partnership with the National Concrete Masonry Association, Education & Research Foundation (NCMA FDN). The competition will challenge students, working individually or in teams, to explore a variety of design issues related masonry construction for a **Community Commons** for gathering, play and shelter.

THE CHALLENGE
The challenges of the past few years have demonstrated the need for places for individuals in communities gather. The goal of this competition is to create a functional space within a community for gathering, play and shelter. A multi-functional building that can be used in a variety of ways is the overall goal. Think about how communities will gather in the future and design a building to meet these needs. Concrete masonry is an ideal choice for this type of building. It is durable and long-lasting, providing a pleasing aesthetic, and can be used for security and safety. Designs should identify multiple ways to take advantage of concrete masonry's benefits to meet the needs of this new community center.

The design competition asks students to use concrete masonry products as the primary material in the design of a state-of-the-art **Community Commons**. This community center, both indoor and outdoor gathering spaces can be used for education, recreation, networking events and more. The Community Commons must be able to be used as a community storm shelter in case of extreme events such as tornadoes, hurricanes, or other natural disasters. Concrete masonry is a flexible, resilient and durable material, and provides vast opportunities for form, function and expression.

PROGRAM
Overall programming of this building is up to the student and/or faculty sponsor. It should include a variety of spaces for different types of community activities. Consider the life cycle of the building and the different types of individuals who would use the community center over time. Students should also consider sustainability and reducing environmental impacts in their design.

A key required component is consideration for a natural or man-made disaster and a way for the building to support community members. Again, it is up to the student/faculty sponsor to identify the disaster and how the building will support the communities. Ideas include a community storm shelter in the event of tornadoes or an area of disaster response/support/temporary lodging after an earthquake.

The following additional parameters are also included:

1. Overall interior and exterior square footage of 12,500 to 25,000 square feet.
2. Must contain at least one large interior space (approximately 5,000 square feet) and one large exterior space (approximately 5,000 square feet).
3. Contain a variety of meeting spaces and functional areas:
    a. Multi-purpose rooms
    b. Physical fitness spaces
    c. Administrative offices
    d. Common areas
    e. Classrooms
    f. Commercial kitchen
    g. Restrooms/changing rooms
4. Buildings can be single or multi-story.
5. Must be ADA compliant.
6. The community center must also include outdoor spaces for gathering and activity.
7. The area used for shelter from disaster must comply with relevant FEMA, FERP, and/or International Building Code requirements for that use and disaster.

SITE
The site for the competition is the choice of the student and/or faculty sponsor. However, the site should be accessible to a medium-to-large size community and provide access to multiple modes of transportation such as public transportation, biking, and/or walking. Submissions will be required to explain the site selection, strategy, and access graphically or otherwise.

CONSTRUCTION TYPE
The primary structural system must be concrete masonry. This can be single-wythe concrete masonry or multi-wythe, with the backup being CMU. Participants are encouraged to consider innovative ways to use concrete masonry products in interior, exterior, and landscape applications. Outdoor spaces can include concrete masonry (such as screen or privacy walls) as well as other dry-cast concrete products, such as concrete pavers and segmental retaining wall units.

Concrete Masonry Units (CMU)
CMU are manufactured using dry-cast concrete on high-speed manufacturing equipment. Dry-cast concrete differs from other types of concrete in that it is initially mixed to a very stiff consistency. This consistency facilitates production through manufacturing equipment. This equipment utilizes compaction and vibration to form the units, and a curing process to accelerate hardening.

There are several American Society for Testing and Materials (ASTM) specifications that cover concrete masonry products. The primary one is ASTM C90, *Standard Specification for Loadbearing Concrete Masonry Units*.

Additional Concrete Products
The manufacturing process for CMU is also used to make a variety of other types of products, including segmental retaining wall (SRW) and concrete paving units. These are primarily used in hardscape applications (residentially, commercially, and more).

AWARDS
Jurors will select First, Second, and Third prize winners, in addition to a selected number of honorable mentions, all at the discretion of the jury. A total of **$20,000** USD is distributed by ACSA, in the following manner to the winners:

First Prize	Student	$8,000
	Faculty Sponsor	$3,000
Second Prize	Student	$4,000
	Faculty Sponsor	$2,000
Third Prize	Student	$2,000
	Faculty Sponsor	$1,000

ELIGIBILITY
Because the support of NCMA FDN is largely derived from masonry companies whose markets are mainly in the U.S. and Canada, the ACSA/NCMA Student Competition is open to students and/or student teams from ACSA Full and Candidate Member Schools, as well as ACSA Affiliate Members Schools from the U.S., Canada, and Mexico only.

CRITERIA FOR JUDGING
Submissions must clearly address the specific issues of the design challenge, submissions must clearly demonstrate the design solution's response to the following requirements:

- A clear understanding of concrete masonry units–deployed with maximum innovative potential
- A strong conceptual strategy translated into a coherent integrated design proposal
- An articulate mastery of formal concepts and aesthetic values
- A compelling response to the physical and cultural context of the scheme
- A mature awareness of and an innovative approach to sustainability as a convergence of social, economic, and environmental issues
- A thorough appreciation of human needs and social responsibilities

RULES

Registration
A faculty sponsor is required to enroll students online (available at www.acsa-arch.org) by April 5, 2023. Registration can be done for your entire studio or for each individual student or team of students participating. Students or teams wishing to enter the competition on their own must have a faculty sponsor, who should complete the registration. There is no entry or submission fee to participate in the competition. Each registered student and faculty sponsor will receive a confirmation email that will include information on how the student(s) will upload final submissions online. Please add the email address competitions@acsa-arch.org to your address book to ensure that you receive all emails regarding your submission.

During registration the faculty will have the ability to add students, add teams, assign students to teams, and add additional faculty sponsors. Registration is required by April 5, 2023, but can be changed, edited, and added to until a student starts a final submission; then the registration is no longer editable.

Registration Steps:

1. Faculty log into the ACSA website,
2. Click the "Register your Students NOW" button,
3. Select the 2023 Concrete Masonry Competition from the submission type dropdown menu & Click "Enter",
4. Select "Individual Registration" to add individual student. Click "Save and Continue". You will need to know each student's first & last names, email, & institution, which are all required fields for each student,
5. Select "Team Registration" if this is a team registration, you may add additional students by clicking "Add Student" to the same submission to this team, teams must be limited to a maximum of five students,
6. Once the individual student or team is complete, Click "Submit",
7. Repeat steps 3 – 6 for each individual or team.

Faculty Responsibility
The administration of the competition at each institution is left to the discretion of the faculty within the guidelines set forth in this document. Work on the competition should be structured over the course of one semester during the 2022-2023 academic year.

Each faculty sponsor is expected to develop a system to evaluate the students' work using the criteria set forth in this program. The evaluation process should be an integral part of the design process, encouraging students to scrutinize their work in a manner similar to that of the jury.

The intent of this competition is to provide an academically rigorous design challenge suitable for integration into the curriculum of an architectural design studio or course. Curriculum integration is not a requirement of competition guidelines but is strongly encouraged. The administration of the competition at each institution is left to the discretion of the faculty within the guidelines set forth in this document.

Digital Submission Format
Submissions must be presented on four 20" x 30" digital boards, no more than 20MB each. All boards are required to be uploaded through the ACSA website as JPEG files. The names of student participants, their schools, or faculty sponsors, must NOT appear on the boards, or in the project title or project title file name(s).

Design Essay or Abstract
A brief essay, 300 words maximum, is required as part of the submission describing the most important concepts of the design project. Keep in mind that the presentation should graphically convey the design solution and context, and not rely on the design essay to convey a basic understanding of the project. The names of student participants, their schools, or faculty sponsors, must NOT appear in the design essay. This abstract is included in the final online submission, completed by the student(s) in a simple copy/paste text box.

Program Summary
A program summary, 150 words maximum, diagram/text of spaces and areas is required as part of the submission. All interior and exterior spaces are to be included; total net and gross areas are required. The program summary is included in the final online submission, uploaded by the student(s) in a simple copy/paste text box.

Required Submission Documents
Submissions must include (but are not limited to) the following required drawings:

- Site plan (with north arrow) showing proposal in its context of surrounding buildings and topography, together with details of access/circulation;
- Floor plans, for each unit, to show program elements, spatial adjacencies and navigation strategies;
- Street elevations, building elevations, site sections, and building sections sufficient to show site context and major spatial and program elements;
- Three-dimensional representations – in the form of axonometrics, perspectives showing the proposal in its context, montages and/or physical model photographs – to illustrate the character of the project;
- Large scale drawing(s), either orthographic or three dimensional, illustrating:
    - the use and detailing of concrete masonry units;
    - integrated design

Incomplete or undocumented entries will be disqualified. All drawings should be presented at a scale appropriate to the design solution and include a graphic scale.

Online Project Submission
After the faculty sponsor completes the online registration, each student will receive a confirmation email, which will include a link to complete the online submission. The student is required to submit the final entries that must be uploaded through the ACSA Competition website at www.acsa-arch.org by 11:59 pm, Pacific Time, on June 7, 2023. If the submission is from a team of students, all student team members will have the ability to upload the digital files. Once the final submit button is pressed no additional edits, uploads, or changes can be made. You may "save" your submission and return to complete. Please note: The submission is not complete until the "complete this submission" button has been pressed. For team projects, each member of team projects may submit the final project, but each project should be submitted only once. Once the final submission is uploaded and submitted, each student will receive a confirmation email notification.

The final submission upload must contain the following:

- Completed online registration including all team members and faculty sponsors,
- Each of the four 20"x30" boards uploaded individually as high resolution JPEG files, no more than 20MB each,
- A design essay or abstract (300 words maximum)
- A program summary diagram/text of spaces and areas (150 words maximum).

The names of student participants, their schools and faculty sponsors must NOT appear on the boards, abstract, program summary, or in the file name.

Winning projects will be required to submit high-resolution original files/images for use in competition publications and exhibit materials. By uploading your files, you agree that the Association of Collegiate Schools of Architecture (ACSA) has the rights to use your winning submission, images and materials in a summary publication, online and in promotional and exhibition resources. ACSA will attribute authorship of the winning design to you, your team, faculty and affiliation. Additionally, you hereby warrant that the submission is original and that you are the author(s) of the submission.

Schedule

April 5, 2023	Registration Deadline (free registration)
June 7, 2023	Submission Deadline
Summer 2023	Winners Announced

RESOURCES

Entrants are encouraged to research references that are related to both the topic of the competition and precedent projects that demonstrate innovative use of concrete such as those listed below. An intention of all ACSA competitions is to make students aware that research is a fundamental element of any design solution.

- The National Concrete Masonry Association (NCMA)
- Interlocking Concrete Pavement Institute (ICPI)
- CMU Inspiration
- SRW Inspiration
- Technical Resources
- Online Education

Other masonry industry organizations/resources:

- The Masonry Society
- Canadian Concrete Masonry Producers Association
- International Masonry Institute
- Mason Contractors Association of America

Local/State/Regional/Provincial Groups: There is a broad network of local concrete masonry promotion groups that have resources to support students and professors. Contact NCMA FDN for assistance in getting connected with groups in your area.

SPONSORS

National Concrete Masonry Association Education and Research Foundation (NCMA FDN)
https://ncma.org/

National Concrete Masonry Association Education and Research Foundation
NCMA FDN is the champion of producers, suppliers, builders, contractors, architects, engineers and more, all over North America and the globe. The mission of the NCMA Foundation is to advance and support the concrete masonry and hardscape industry through research and educational programs designed to meet the future needs of the industry. They unites, supports, and represents the producers and suppliers of concrete masonry systems – including concrete masonry, segmental concrete pavements, manufactured stone veneer, segmental retaining walls, and other hardscape systems.

Association of Collegiate Schools of Architecture
www.acsa-arch.org

Administrative Organization
Association of Collegiate Schools of Architecture
Leading Architectural Education and Research
The Association of Collegiate Schools of Architecture is a nonprofit, membership association founded in 1912 to advance the quality of architectural education. The school membership in ACSA has grown from 10 charter members to over 250 schools in several membership categories. These include full membership for all accredited programs in the United States and government-sanctioned schools in Canada, candidate membership for schools seeking accreditation, and affiliate membership for schools for two-year and international programs. Through these schools, over 6,000 architecture faculty members are represented. In addition, over 500 supporting members composed of architecture firms, product associations and individuals add to the breadth of interest and support of ACSA goals. ACSA provides a major forum for ideas on the leading edge of architectural thought. Issues that will affect the architectural profession in the future are being examined today in ACSA member schools.

FOR MORE INFORMATION

Program updates, including information on jury members as they are confirmed, may be found on the ACSA web site at www.acsa-arch.org/competitions. Additional questions on the competition program and submissions should be addressed to:

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