



Construction Industry
Round Table

Celebrating 30 Years



ACE MENTOR PROGRAM
ARCHITECTURE • CONSTRUCTION • ENGINEERING

CHICAGO
ARCHITECTURE
FOUNDATION

CIRT National Design & Construction Competition

2018 Competition Packet
CIRTcompetition.org

“What we learn, we learn by doing.”
– **Aristotle**, Greek philosopher

In coordination with the ACE Mentor Program of America

About the Competition

The 2018 CIRT National Design & Construction Competition invites ACE Mentor Affiliate teams (student and mentors) from across the country to design solutions for one of three challenges: an ultra-flexible home, an ideal high school or revitalize an urban block.

The competition is maintained, coordinated and juried by the Construction Industry Round Table (CIRT), in coordination with ACE Mentor National and the Chicago Architecture Foundation. The 2018 theme celebrates the innovations and contributions the design and construction community makes to the quality of American life, while understanding the issues and challenges the industry faces to deliver on this legacy.

The true goal of the competition is to judge the ability of the students to make a reasoned, coherent, well thought out, clear presentations on their team's design and construction approaches within the project's objectives and/or constraints.

Eligibility

To be eligible to compete, applicant must be a participating ACE Mentor Program student and enter with a team of three or more students and ACE Affiliate(s).

Teams

Any ACE Mentor Affiliate/Chapter can volunteer to participate in the Competition. Teams must be comprised of three or more students. The intent is to encourage group dynamics requiring assignments, compromise, and/or consensus building.

CIRT strongly requests and recommends that Affiliates with more than one team consider submitting entries in the different challenges rather than multiple entries in the same category. It would greatly increase the value of the competition and improve the odds of having one of the teams among the recognized entries.

Competition Timeline

September 15, 2017	Competition Announced
January 1, 2018	Submission platform open
March 7	Final submissions due
March 23	Finalists notified
April 30	Finalist Presentations in Washington, D.C.

Project Submission

All work must be submitted to the competition portal at CIRTcompetition.org by 5:00pm EST on March 7, 2018 to qualify for jury review. The CIRT National Design & Construction Competition is free to enter. See Project Submission section for details.

Winners + Prizes

A professional jury will review eligible entries in the preliminary round. Then top finalists will compete for first, second or third place in the Final Round in Washington, D.C. Winning teams, on behalf of their Affiliates, will receive a monetary award that can be used for any purpose to support the operations, programs, grants, and/or needs of the Affiliate.

First Place Team	\$5,000 + stipend for travel expenses
Second Place Team	\$3,000 + stipend for travel expenses
Third Place Team	\$2,000 + stipend for travel expenses
Runner-Up Teams	Additional prizes

Competition Schedule & Awards

The annual competition is announced in the early fall and officially begins in January concluding at the CIRT Spring Conference, which is usually held in late April or early May. At the conference the winner(s) will be selected and announced. CIRT will present prizes for the top three national finalists, plus prizes for runner-ups, in addition to providing a travel expense stipend (approximately \$1,000 per team) to put towards costs associated with attending the final round as the Affiliate/Chapter best determines.

Challenges

FLEXIBLE HOME

Design a modular, ultra-flexible, middle-class home that can be easily expanded, contracted or split during the lifetime of its owners. Design and construct a basic, minimum footprint module that can accommodate reasonable living spaces for a one- to multi-person household. The module must consider affordability, feasibility, changeability and be no more than three stories. Use of materials, building techniques, structural elements and approaches should emphasize sustainability as well as being equipped with the latest smart building and security technologies.

About the Challenge and the Site

The goal is to design and construct a basic module or 'shell' that can accommodate a reasonable living space, kitchen, bathroom and bedroom for a –initially- one or two-person household. This should provide a minimum footprint that can be justified for comfortable living conditions.

This module must be buildable within a range affordable to likely buyers. Consider the starting budget and/if it will allow for funds for future changes. Be sure to clearly demonstrate how this unit/home can be easily 'extended' using other modules – such as bedrooms, bathrooms or other accommodation units.

The site is a typical rural/suburban one and you can assume that there are no complex planning restrictions. However, the site is not able to accommodate anything more than three stories high, and your designs should indicate how parking for up to four vehicles can be provided.

Use of materials, building techniques, structural elements and approaches should emphasize sustainability, energy efficiency and recyclable eco-friendly products, as well as being equipped with the latest smart building and security technologies.

Dimensions, size, costs, etc. must be determined by the team, but all decisions should be explained and warranted based on the resources likely to be attracted to such a proposal. A square foot cost estimate must be provided.

REVITALIZE AN URBAN BLOCK

Design solutions to enhance and stimulate new living and civic appropriation systems on a block wide scale. Proposed ideas should promote the revival of old usages, encourage the emergence of new activities and enhance job development. The challenge requires evidence of interdisciplinary skills including strategic site selection, structural rehabilitation or replacement, transportation, open or recreational spaces and other mixed use functions.

About the Challenge and the Site

This option challenges teams to tackle the task of urban regeneration and renewal of an entire block. Present ideas that will enhance and consider the block's existing users and built environment.

Structures can be added, demolished, rehabilitated, repurposed, etc. your rationale must be provided.

The challenge requires consideration of interdisciplinary skills such as site selection, planning, structural rehab or replacement, open spaces, transportation, mix use purposes, etc. and critical thought. Team should propose operational strategies to a specific definable area of the team's choosing, which must be justified and explained.

What is included, changed, added, eliminated, etc., as well as the costs associated with all phases of the project can be determined by the team, but all decisions should be explained and warranted based on the resources likely to be attracted to such a proposal.

A square foot cost estimate must be provided.

ENVISIONING AN IDEAL SCHOOL

Design solutions to transform, reimagine, or repurpose underutilized common areas in a high school to improve, expand or otherwise enliven its value and use to the student body. Proposals must consider common spaces that accommodate studying or down time, food prep and consumption, and recreational or social space in and outside of the building. Use of materials, building techniques, structural elements and approaches should emphasize sustainability as well as being equipped with the latest smart building and security technologies.

About the Challenge and the Site

The goal of this challenge is to envision what design/construction solutions can be applied to transform, reimagine, or repurpose common areas in a high school to improve, expand, or otherwise enliven its value and use to the student body. This effort **MUST** consider the following use of the common space to accommodate: study/down time; food prep and consumption; recreational or social space. All of which can be distinct areas and/or in a way in which each can be accomplished without interfering with the other.

Teams must demonstrate or show use of and explain how specific design/construction elements transform underutilized dingy, dark, dirty, unattractive spaces (whether cafeterias, lounges, library, or entrance hall, stage areas) into inviting exciting and useful areas for students to gather. Before and after depictions are highly recommended in order to “connect” the improvement to a specific element.

Teams must include other ancillary improvements that would further enhance your specific decisions, such as entrances, outdoor areas, sporting facilities/spaces, parking, administrative, theatre, etc.

Dimensions, size, costs, etc. must be determined by the team, but all decisions should be explained and warranted based on the resources likely to be attracted to such a proposal. A square foot cost estimate must be provided.

Use of materials, building techniques, structural elements and approaches should emphasize sustainability, energy efficiency, and recyclable eco-friendly products as well as being equipped with the latest smart building and security technologies.

Project Submission

All work must be submitted to the competition portal at CIRTcompetition.org by 5:00pm EST on March 7, 2018 in order to qualify for jury review.

Submission Requirements

Any media will be accepted, however, **all final submissions must be uploaded as digital files (JPGs or PDFs) to the competition platform** at www.CIRTcompetition.org. You must scan any drawings, photograph physical models, or export views of your 3D digital model to be uploaded.

Supporting text documents may not be reviewed by the jury; all content must be on the competition board.

File Name Requirements

Files must be labeled in the following format:

ChallengeName_City_AffiliateFirstInitialLastName_#of#.jpg

Example: "FlexibleHome_Chicago_JSmith_1of1.jpg" "FlexibleHome_Chicago_JSmith_2of2.jpg"

Finalist Board Submissions

Teams selected as finalists are required to print 1 or 2 physical boards for the final presentation round, to be held in conjunction with a national conference in Washington, DC. Boards must be:

- a maximum of two, approximately 841mm x 594mm
- mounted on two A1 lightweight boards.

A brief written explanation describing the context and thinking behind the scheme should be included on the board(s). Photographs (of the site, 3D model, etc.) may be mounted or scanned onto the displays. No specific drawings or scales are prescribed, but the presentation must convey the ideas underlying the design, its overall forms and spaces, its character and atmosphere. A narrative addressing the design process should be on or presented as part of the boards.

Local printing options include:

ABC Imaging	ARC
1120 20 th Street, NW	8245 Boone Blvd.
Suite 102-103	Vienna, VA 22182
Washington, DC 20036	
703/848-2997	703/893-0335(o), 703/893-0336 (f)
www.abcimaging.com	www.e-arc.com

Additional details about boards, printing, travel and the final presentation round will be sent to finalist teams in March 2018.

Jury Criteria

The judges are looking for overall clarity, understandability, constructability, completeness, flow of ideas and how the proposed solution realistically and fully meets the challenge. Design should be clear, concise, complete and well thought out with sufficient information to stand independently from any written narrative or report. Teams must demonstrate their use of the design process.

Design Process

Jurors will carefully consider your design concepts, renderings, etc. in addition to how you address the following components of the design process:

Question A:

Define and/or describe the problems and challenges you faced when deciding on the design project you chose to do for the competition.

Question B:

Thoroughly describe your design process, in writing and through visuals (e.g., sketches, renderings, stepped process, before and after, budgets, timelines, etc.) that specifically and realistically meets the precise or exact nature of the challenge and/or the client goals/needs.

Question C:

Explain how your design approach is an appropriate, innovative solution that realistically responds to the precise design competition problem. Explain how your design is different from other approaches or processes, if such is the case; and/or meets budgetary constraints, timeline issues or other challenges.

Question D:

Describe any social, ecological or otherwise beneficial qualities of your design solution. For example, is it a universal design? How so? Is it environmentally friendly? Does it use cost-effective or recyclable materials?

Question E:

Describe and/or demonstrate what you learned from this design competition.

Evaluation Criteria

The following design and construction aspects will be jury evaluation criteria, and should be explained where appropriate:

- site selection and its context (built and/or natural)
- constructability (structural challenges, materials, textures, colors, etc.)
- strategy for sustainability
- surrounding landscape/external spaces
- life and activities, in and around the building, including the qualities of enclosed spaces showing furniture, fittings and finishes (where needed or appropriate to the design competition selected).

Jury Review

Judging Approach

The overall theme or evaluation criteria for the competition is one founded on the practical aspects of the profession, particularly with respect to constructability, use of materials, meeting deadlines, and establishing realistic/reasonable expenses or budgets. ***More important than the actual design solution, is the methods and processes used to arrive at a solution. Fundamentally, the spirit of this competition is one of design and construction.***

During the final round, great weight will be given to the ability of the ACE students (i.e. their selected representative) to articulate a clear, comprehensive, coherent, and cogent presentation that persuades the judges as to selecting his/her team as the winning entry. Preparing the student representative is part of the overall process that the other team members will receive benefit from as well.

Judging Process

All entries must be submitted to the platform and meet the submission and student eligibility requirements to be judged.

The preliminary rounds will be determined by what is submitted to the platform. Each of the challenges will have their top three entries determined as part of selecting the national finalists to move onto the presentation round in Washington D.C. to determine the National Champion.

If none of the design entries meet the requirements, the panel reserves the right not to award a winner. There is no requirement that each option/challenge has a representative among the three finalists. All decisions made by the panel are final.

Jurors

The panel of judges will be mainly comprised of CIRT member CEOs of the leading design and construction firms in the United States. A jury will be selected for the preliminary and final presentation rounds of the competition.

Additional Information

PLATFORM

The competition will be hosted on an online competition platform:

- Competition main page: www.CIRTcompetition.org
- DiscoverDesign Competition Challenges: www.discoverdesign.org/competitions

CONTACT INFORMATION

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ADDITIONAL RESOURCES

Teams may collaborate digitally using the Chicago Architecture Foundation's online learning platform, DiscoverDesign.org. Teams can select any of the three CIRT challenges, leave comments, share and upload images, links, and other resources as they work through the design process. Mentors can set project timelines and deadlines, and remix a challenge to suite your unique project goals. Create an account to start. Contact CAF's Helpdesk at eduweb@architecture.org.

TERMS AND CONDITIONS

The project options for the CIRT Design Competition may have been derived from actual competitions that are underway or have been recently completed. The information furnished has been edited and/or modified so as to meet the needs and form the basis of the CIRT competition.

If for any reason you believe a key piece of information is missing or you are unclear as to a specific reference in the information provided – please make an educated guess or assumption that would further your proposal (and simply indicate what that assumption was and why you made it). Please do not let a geographical reference or other individual piece of information prevent you from completing the CIRT design competition submission!

There is no cost to enter this competition.

Mail-in submissions of final projects will not be accepted for the preliminary round. Finalists will be asked to provide boards for the final panel.

By participating, you agree to comply with all competition requirements.

Applicants may be disqualified if they:

- Are not a member of a qualified ACE Mentor of America Affiliate team.
- Do not upload content (text and/or images) onto the competition platform.
- Do not adhere to the design, writing and presentation requirements.
- Plagiarize or violate copyright rules by submitting non-original material—whether student or professional, built or unbuilt.

Permissions

By submitting to the CIRT National Design & Construction Competition you grant permission to the rights of your image(s) to be used for educational purposes such as conference presentations, advertising and promotional materials, exhibitions, informal presentations or online. Images may be edited, copied, exhibited, published or distributed.