AIA COTE Top Ten for Students

2025 Competition **PROGRAM**

Competition Overview

Architects play a crucial role in addressing both the causes and effects of climate change through the design of the built environment. Innovative design thinking is key to producing architecture that meets human needs for both function and delight, adapts to climate change projections, continues to support the health and well-being of inhabitants despite natural and human-caused disasters, and minimizes contributions to further climate change through greenhouse gas emissions. Preparing today's architecture students to envision and create a climate adaptive, resilient, and carbon-neutral future must be an essential component and driving force for design discourse.

Given their long lifespan, new buildings must be designed to address solutions to climate change and to respond to its projected impacts, well into the second half of the 21st Century and beyond. As with the COTE Top Ten award for built work by design professionals, COTE Top Ten for Students allows designs to be characterized in terms of 10 principles ranging from Community to Water to Wellness.

The 2025 AIA COTE Top Ten for Students Competition will offer architecture students the opportunity to compete in two separate categories:

Category I: FOUNDATION LEVEL
This category is open to students enrolled in first-year and second-year design studios, or related classes; in 2-year, 4-year, and undergraduate programs from any ACSA member school, including international member schools. Faculty will be required to confirm satisfaction of this requirement upon registration in this category.

Category II: UPPER LEVEL
This category is open to upper-level students (third year or above, including graduate students) from any ACSA member schools, including international member schools. Faculty will be required to confirm satisfaction of this requirement upon registration in this category.

Students may not enter both categories of the competition.

About the Competition

The AIA COTE® Top Ten for Students Competition is sponsored by The American Institute of Architects Committee on the Environment (AIA COTE®), in partnership with the Association of Collegiate Schools of Architecture (ACSA). Each year, the competition recognizes ten exceptional student design studio projects that integrate health, sustainability, and equity, evaluated following the same categories of the AIA COTE® Top Ten Award for built work, and the AIA Framework for Design Excellence (now adopted as the basis of professional practice and awards across the AIA).

Awards and Recognition
Ten projects will be chosen for recognition at the discretion of the jury. The ten winners will be based on the percentage of actual submissions received in each category. The approximately top 2-3% juror ranking for each category will be selected as winners.

Winners and their faculty sponsors will be notified of the competition results directly. Winning projects will and displayed at the 2026 AIA National Convention. Winning projects will also be promoted on the ACSA website & the AIA COTE® website. Winning projects will be recognized during the 2026 AIA National Convention at the COTE reception.

Winning students and their faculty sponsors will receive cash prizes totaling **$13,500** with each of the 10 selected winners receiving:

Student(s)	**$1,000**
Faculty Sponsor(s)	**$350**

Framework for Design Excellence
The COTE Top Ten for Students Competition seeks compelling design submissions that meaningfully address the future impacts of climate change, imagine and illustrate a healthy, sustainable and equitable future. Emphasis is to be placed on achieving zero emissions, adapting to projected climate impacts, designing for resilience, and addressing social and environmental equity.
Entries will be judged on design innovation and how well the project has addressed measures of the Framework for Design Excellence:

- Design for Integration
- Design for Equitable Communities
- Design for Ecosystems
- Design for Water
- Design for Economy
- Design for Energy
- Design for Well-Being
- Design for Resources
- Design for Change
- Design for Discovery

Criteria for Judging
Successful responses should demonstrate design moving towards carbon-neutral operation through a creative and innovative integration of design strategies such as daylighting, passive heating and cooling, materials, water, energy generation, and other sustainable systems, through a cohesive and beautiful architectural understanding. Issues to consider include community enhancement, land use and effect on site ecology, bioclimatic design, energy and water use, impact on health and wellness, approach to environmental quality, materials and construction, adaptation, long-life considerations, and feedback loops. Entries will also be judged for the success and innovation that the project has met the ten principles of the Framework for Design Excellence.

Eligibility
The competition is open to students from all ACSA member schools around the world. You can find a listing of all ACSA member schools online. Students are required to work under the direction of a faculty sponsor. Submissions will be accepted for individual as well as team projects. Teams must be limited to a maximum of three students.

An ACSA member school, faculty sponsor is required to enroll students by completing an online registration form prior to submission by April 9, 2025. Students are invited to submit their studio projects. Entries must be buildings, but can be of any program, at any scale, in any location. Projects can be a remodel or adaptive re-use. Work should have been completed in a design studio or related class within the 2024-2025 calendar year.

PROGRAM

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Entries will be judged on design innovation and how well the project has addressed principles of the Framework for Design Excellence:

Design for Integration
Sustainable design is an inherent aspect of design excellence. Projects should express sustainable design concepts and intentions and take advantage of innovative programming opportunities.

Principle Guide: Describe how sustainability strategies are incorporated into the overall design. What are the major environmental issues and goals? How does the building respond to the local climate, site and occupant comfort?

May include:

- Key environmental issues; how and why they became important priorities
- Key ecological goals and concepts for your project and how they were expressed in the design
- How sustainability measures led to a better overall project design
- Process of program analysis; resource efficiencies realized by innovative programming
- Efforts to “right size” the project and to reduce unnecessary square footage
- Project response to local climate, sun path, prevailing breezes, soil, hydrology, and seasonal and daily cycles through passive design strategies
- Description of internal versus external building loads with regard to building massing, orientation, fenestration/shading related to the sun’s path and prevailing winds
- Design strategies that reduce/eliminate the need for non-renewable energy resources
- How these strategies specifically shaped the plan, section, and massing

Suggested Graphics: Building section, or other appropriate diagram that demonstrates bioclimatic strategies and concepts. A profile of local climate that illustrates appropriate design strategies, or summary sustainability diagram (for building operations)

Metric: Percent of the year that occupants will be comfortable using passive systems

Design for Ecosystems
Sustainable design protects and benefits ecosystems, watersheds, and wildlife habitat in the presence of human development.

Principle Guide: How does the development of the site respond to its ecological context? Consider water, air, plants, and animals at different scales.

May include:

- How the development of the site and program responds to its ecological context, including the watershed, air, and water quality at different scales from local to regional level
- How the design accommodates wildlife habitat preservation and creation
- How the design protects or creates on-site ecosystems
- How the design responds to local development density or conditions
- How the design encourages local food networks

Suggested Graphic: Natural systems diagram (on-site, context) and/or Native Landscape Profile (flora, fauna)

Metric: % site area designed to support vegetation

Design for Economy
Sustainable design celebrates affordable solutions around true economy—good first costs, good long term operations cost, and true benefits for occupant health and productivity.

Principle Guide: Describe how economics influenced the design. What do you think your project might cost to build? How would this construction cost compare with ‘typical’ buildings of the same building type? How does your design represent true economy by providing more value for what it costs?

May include:

- An approach that uses less total area comprised of multi-use areas, instead of many single-use areas
- How savings are achieved for operating costs (energy, water…)
- How the design promotes occupant health, leading to lower absenteeism in the workplace and lower health care costs

Suggested Graphic: Lifecycle cost or value diagram

Metric: None

Design for Well-Being
Sustainable design creates comfort, health, and wellness for people who inhabit or visit buildings.

Principle Guide: Discuss design strategies for optimizing daylight, indoor air quality, connections to the outdoors, and thermal, visual, and acoustical comfort.

May include:

- How does design promote the health of the occupants?
- How does design promote activity or exercise, access to healthy food choices, etc.
- Outline of material health strategies, including selection strategies
- Design strategies for daylighting, task lighting, and views
- Design strategies for ventilation, indoor air quality, and personal control systems
- How the project's design enhances users' connectedness to nature
- Design team approach to integration of natural systems and appropriate technology

Suggested Graphic: Model photos, drawings or diagrams of daylight and ventilation strategies; test models.

Metric: Percent of the building that can be daylit (only) during occupied hours; Percent of floor area with views to the outdoors; Percent of floor area within 15 ft. of an operable window. Daylight performance using the following concepts: Daylight Availability, or Annual Sunlight Exposure along with Spatial Daylight Autonomy: % of regularly occupied area achieving at least 300 lux at least 50% of the annual occupied hours.

Design for Change
Sustainable design anticipates adapting to new uses, climate change, and resilient recovery from disasters.

Principle Guide: Describe how the design promotes long-term flexibility, re-use, adaptability, and resilience.

May include:

- How the project was designed to promote long-term functionality and adaptability
- Anticipated project service life; description of components designed for disassembly
- Materials, systems, and design solutions developed to enhance versatility, durability, and adaptive reuse potential
- How does the design anticipate restoring or adapting function in the face of stress or shock, such as natural disasters, blackouts, etc.?
- How does the project address passive survivability (providing habitable conditions in case of loss of utility power or water)?
- How the project anticipates and celebrates weathering over time
- How does design for address adaptive climate: conditions in 2030 and in fifty years

Suggested Graphic: Specific hazard and climate analysis for project.

Metric: None

Design for Equitable Communities
Sustainable design values the unique cultural and natural character of a given region.

Principle Guide: What is the project's greater reach? How could this project contribute to creating a diverse, accessible, walkable, just, and human-scaled community? Who might this project be forgetting? How can the design process and outcome remove barriers and promote inclusion and social equity, particularly with respect to vulnerable communities? What opportunities exist in this project to include, engage, and promote human connection? How can the design support health and resilience for the community during times of need or during emergencies?

May include:

- What is the project's greater reach? How could this project contribute to creating a diverse, accessible, walkable, just, and human-scaled community?
- Who might this project be forgetting? How can the design process and outcome remove barriers and promote inclusion and social equity, particularly with respect to vulnerable communities?
- What opportunities exist in this project to include, engage, and promote human connection?
- How can the design support health and resilience for the community during times of need or during emergencies?

Graphic: Open

Metric: Walk score: (from Walkscore.com) and/or urban networks diagram (walk, transport, etc.)

Design for Water
Sustainable design conserves water and protects and improves water quality.

Principle Guide: How does the design manage storm water? How does the design conserve potable water? How is the project innovative in the way that it uses and treats water?

May include:

- How building and site design strategies manage site water and drainage
- Design strategies that capitalize on renewable water sources (i.e. precipitation) on site
- Water-conserving landscape and building design strategies
- Reuse strategies for water including use of rainwater, graywater, and wastewater

Suggested Graphic: Diagram representing how water arrives onto the site, how it is used or reclaimed, and how it leaves the site.

Metric: Percent of storm water that is managed onsite: (2 year, 24-hour event. Use supplied spreadsheet in competition website to calculate)

Design for Energy
Sustainable design conserves energy and resources and reduces the carbon footprint while improving building performance and comfort. Sustainable design anticipates future energy sources and needs.

Principle Guide: How does the design seek to decrease the total energy use and carbon footprint of the building? Emphasize strategies to reduce heating and cooling loads, reduce electricity demand, reduce plug loads, and generate on-site carbon free energy. Describe your approach towards achieving carbon neutrality.

May include:

- How the design reduces energy loads for heating, cooling, lighting, and water heating
- How the design and integration of building systems contributes to energy conservation and reduced use or elimination of fossil fuels, reduces green house gas emissions and other pollution, and improves building performance and comfort.
- Use of on-site renewable and alternative energy systems.
- Strategies to reduce peak electrical demand.
- How the design remains functional during power outages or interruptions in fuel supply

Graphic: Open

Metric: Total energy use intensity (EUI) in kBtu/sf/yr: (build a simple energy model to calculate EUI using DesignBuilder, ArchSim, HoneyBee, eQuest, Sefaira, Autodesk® Insight 360, or another energy modeling program); Energy generation (if any) in kWh/yr: (use PVWatts® Calculator or solar-estimate.org for solar or wind); Net EUI (with renewables if applicable).

Design for Discovery
Sustainable design strategies and best practices evolve over time through documented performance and shared knowledge of lessons learned.

Principle Guide: What steps would you take to ensure that the building performs the way that it is designed? What lessons have you learned from this project that you will apply to the next project? What lessons have you learned from past projects that were applied to this project?

May include:

- Modeling and evaluation of the design during the programming and design phases
- Collaborative efforts between design team, consultants, client, and community
- Lessons learned during the design of the building
- How these lessons would change your approach to this project or future projects
- A question that would be investigated in a post-occupancy evaluation of this project

Suggested Graphic: Open

Metric: None

Design for Resources
Sustainable design includes the informed selection of materials and products to reduce product life-cycle embodied energy and carbon, and environmental impacts while enhancing building performance and optimizing occupant health and comfort. Adaptive reuse and renovation/preservation dramatically reduces a buildings material consumption and carbon footprint.

Principle Guide: Describe the project's construction, material selection criteria, considerations, and constraints. What efforts were made to reduce the amount of material used and waste and the environmental impact of materials over their lifetime? Discuss specific materials used.

May include:

- Efforts to reduce the amount of material used on the project
- Materials selection criteria, considerations, and constraints for: optimizing health, durability, maintenance, and energy use reducing the impacts of extraction, manufacturing, and transportation
- Enclosure performance in relation to air, moisture, water and thermal characteristics
- Consideration of life cycle embodied energy and carbon impacts and results of life-cycle assessment if available
- Construction waste reduction plans: strategies to promote recycling during occupancy

Suggested Graphic: Wall section of the building envelope design and either a hygro-thermal analysis or life cycle assessment.

Metric: Estimated carbon emissions associated with building construction (lbs CO2/sf, using The Construction Carbon Calculator, Athena Impact Estimator for Buildings, Tally®, or other)

REGISTRATION & RULES

Schedule

April 9, 2025	Registration Deadline (free registration).
Summer 2025	Jury Convenes
June 4, 2025	Submission Deadline
Fall 2025	Winners Announced

Registration

A faculty sponsor is required to enroll students online (available at www.acsa-arch.org) by April 9, 2025. 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 9, 2025, 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 2025 COTE Competition from the submission type dropdown menu & Click “Enter”,
4. Add an individual student click “Add Student”. You will need to know each student’s first & last names, email, & institution, which are all required fields for each student,
5. 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 should have been completed in a design studio or related class within the 2024-2025 calendar year. Design work completed before Spring 2024 will not be accepted.

Each faculty sponsor may develop an internal system to evaluate the students’ work using the criteria set forth in this Competition Program and the Studio Guide. 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 final result of the design process will be a submission of two presentation boards and a narrative describing the design solution and approach to each of the ten principles of the Framework for Design Excellence.

Submission Materials and Requirements
The COTE Top Ten for Students Competition seeks compelling design submissions in both categories that meaningfully address the future impacts of climate change, imagine and illustrate a healthy, sustainable and equitable future. Emphasis shall be placed on achieving zero emissions, design for climate change and resilience, and addressing social equity and ecology.

The Framework for Design Excellence shall serve to inform the design process and guide the required graphics. Students or student teams must submit the following materials online:

1. Graphics: No more than two (2) digital boards at 24”x36” (JPEG files, no more than 20MB each), to include the following:
   Documentation must adequately convey the project’s relationship to topography and physical context, formal and programmatic organization, circulation patterns, and experiential qualities. All drawings should be labeled; indicate scale and orientation where necessary. At minimum, include the following:
   - Site or context plan
   - Floor plans
   - Building / site sections
   - Perspective or isometric view (digital rendering or model photograph)

   Present diagrams or images that best display how the project meets the design criteria by considering the ten principles of the Framework for Design Excellence. Some principles may require a specific graphic or calculation; others are open-ended. Where applicable, provide labels and notes on how calculated metrics are obtained (basis, method, program used, and assumptions). All metrics should include a short description of key assumptions used in the analysis and where the numbers came from and reliability.

2. Abstract/Narrative: (300 words maximum summary). Project/concept statement should include the design approach, project intentions & strategies. *During submission, simply copy/paste this text into the “Abstract” text field.

3. Program Brief: (300 words maximum) Submissions should include a brief description the building type, gross square footage, project location (city, state, country) & climate zone. *During submission, simply copy/paste this text into the “Program” text field.

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 and north arrow.

Project authorship must remain anonymous. The names of student participants, their schools, or faculty sponsors, must **NOT** appear on the boards, narrative/abstract or project title. **If authorship is revealed on any submission materials the entry will be disqualified.** All metrics should include a short description of key assumptions used in the analysis and where the numbers came from and reliability.

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. All boards are required to be uploaded through the ACSA website in JPEG files (no more than 20MB each). Participants should keep in mind that, due to the large number of entries, preliminary review does not allow for the hanging end- to-end display of presentation boards. Accordingly, participants should not use text or graphics that cross over from board to board.

Students are required to upload final submissions by 11:59 pm Pacific Time on June 4, 2025. If the submission is from a team of students, all student team members will have the ability to upload the digital files.

Submissions may be edited and updated until the submission deadline of 11:59 pm, Pacific Time, June 4, 2025. Once the final submission is uploaded and submitted, each student will receive a confirmation email notification.

Please Note: the submission is not complete until the “Submit” button has been pressed. For teams: each member of team may submit or edit the final project till the deadline of 11:59 pm Pacific Time on June 4, 2025.

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 American Institute of Architects (AIA) and the Association of Collegiate Schools of Architecture (ACSA) have the rights to use your winning submission, images and materials in a summary publication, online and in promotional and exhibition resources. AIA and ACSA will attribute authorship of the winning design to you, your team, faculty, and institutional affiliation. Additionally, you hereby warrant that the submission is original and that you are the student author(s) of the design submission.

Competition Sponsor

About the American Institute of Architects (AIA)

Founded in 1857, the American Institute of Architects consistently works to create more valuable, healthy, secure, and sustainable buildings, neighborhoods, and communities. Through nearly 300 state and local chapters, the AIA advocates for public policies that promote economic vitality and public wellbeing. Members adhere to a code of ethics and conduct to ensure the highest professional standards. The AIA provides members with tools and resources to assist them in their careers and businesses. The AIA engages with civic and government leaders, as well as with the public, to find solutions to pressing issues facing our communities, institutions, nation, and world. Visit www.aia.org.

About the AIA COTE®

The AIA Committee on the Environment (COTE®) works to advance, disseminate, and advocate design practices that integrate built and natural systems and enhance both the design quality and environmental performance of the built environment.

Competition Organizer

About the Association of Collegiate Schools of Architecture (ACSA)

The mission of the Association of Collegiate Schools of Architecture is to lead architectural education and research. Founded in 1912 by 10 charter members, ACSA is an international association of architecture schools preparing future architects, designers, and change agents. ACSA's full members include all of the accredited professional degree programs in the United States and Canada, as well as international schools and 2- and 4-year programs. Together, ACSA schools represent 7,000 faculty educating more than 40,000 students.
ACSA seeks to empower faculty and schools to educate increasingly diverse students, expand disciplinary impacts, and create knowledge for the advancement of architecture. For more information, visit www.acsa-arch.org.

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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Image Credit: 2023 COTE Top Ten for Students Competition Winner
Project Title: Relinquetur Research Center
Student: Gabriel Cachapuz Velasco
Faculty: Alice Guess
Collaborator: David Thompson Architect, David Thompson Studio
Institution: Savannah College of Art and Design