The 15th Annual High School Design Competition invites students in grades 9–12 to engage in the design process and explore potential careers in design.

**Beginner program**
Outdoor classroom

**Advanced program**
High school of the future

**Registration**
Dec. 2, 2019 – Feb. 28, 2020

**Submissions due**
March 27, 2020

aiaatl.org/hsdc
INTRODUCTION

Welcome to the 2020 High School Design Competition! The 15th annual competition is open to high school students in the state of Georgia. Please read the following to participate.

BEGINNER (GRADES 9 & 10)
Open to individuals. Students will learn about plans, sections, and elevations, as well as explore architecture by solving programmatic problems with creativity and ingenuity.

ADVANCED (GRADES 11 & 12)
Open to individuals and groups of up to four participants. Students will delve deeper into the realm of architecture and solve more complex site and programmatic problems. Additionally, students will demonstrate quality design, attention to detail and creativity.

REGISTRATION
Registration must be completed online at aiaatl.org/hsdc. Participation is free and the registration deadline is February 28, 2020, at 5:00 p.m.

KICKOFF MEETING
In January 2020, AIA Atlanta will host a kickoff meeting to guide students, teachers and parents through the beginner and advanced programs. The HSDC committee will answer questions and provide advice for successfully completing the program. Visit aiaatl.org/hsdc for updates.

SUBMISSIONS
All submissions must be received at the AIA Atlanta office by March 27, by 4:00 p.m. Submissions must then be retrieved at the HSDC awards ceremony or they will be discarded.

Mail or hand-deliver submission packages to:
Attn: Missy Bower
AIA Atlanta
50 Hurt Plaza, Suite 109
Atlanta, GA 30303

Questions? Contact Missy at (404) 222-0099 ext 103, or missy@aiaatl.org.

CEREMONY
The awards ceremony takes place on April 30. Finalists will be notified by telephone or email.

PRIZES
Beginner
First, second and third place entries will be recognized, as well as honorable mentions.

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<tr>
<th>Advanced individual</th>
<th>Advanced group (split evenly among group)</th>
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<td>First: $1,200</td>
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BEGINNER PROGRAM

BACKGROUND
New research indicates outdoor learning, an established practice, boosts student interest, attention, and retention. Outdoor learning also helps increase student performance, promotes better health (including mental and social health), fosters better civic understanding, engages families and communities – and it is fun. As design of schools moves fully into the 21st century, students need more opportunities to lean outdoors.

Design of outdoor classroom space considers both environmental factors and learning needs. To be effective in a school setting, the outdoor classroom needs to be usable in all weather – warm, cold, wet, dry – and allow students to move easily between the main school building and the outdoor learning area. It also needs to provide some link or use between the school and the community around it.

PROGRAM OVERVIEW
For the “High School of Tomorrow,” design an outdoor learning space. The site for the classroom is on the same lot as the advanced program for the high school on Telfair Street in Augusta, GA between 11th and 12th Streets. The outdoor learning space is to be located in the southeast corner of the lot adjacent to the Augusta Canal Historic Trail, as indicated attached collateral.

All designs must include the required program elements listed in the program breakdown. In addition to the Required Program Elements, students/designers must include at least one Optional Program Element, shown in the Program Breakdown. The participants may select one or more of the Optional Program Elements and customize the space to suit.
BEGINNER PROGRAM

OUTDOOR CLASSROOM

The space will be used all year in all weather, so designs should take this into consideration. The space will also be used for community gatherings, so there must be a public entrance that doesn’t go through the school.

PROGRAM BREAKDOWN

Required program elements – designs must include all these functions

- Multi-function space open to the outdoors
- Public entry
- Covered area for 30 people minimum

Optional program elements – designs must include at least one of these functions

- Public education. Choose a public education feature to engage members of the community. Examples include:
  - Information about the sustainable aspects of the school
  - Community garden
  - Learning kitchen
- Sustainability. Choose a sustainability feature to feature in the design. Examples include:
  - Reuse of all site rainwater
  - Renewable energy to power outdoor classroom
- Emerging Ideas. Choose a topic of learning and design the space around it. Examples include:
  - Artificial intelligence
  - Social-emotional learning
  - Think tank where students address local challenges and problems
PRESENTATION REQUIREMENTS
Student submissions should be presented on a maximum of two (2) boards which are no larger than 20”X30” each. Either portrait or landscape orientation is acceptable, but all boards should be presented in the same orientation.

The minimum presentation drawings include:
- Site plan showing the site and surrounding context (just showing the site boundary is strongly discouraged) – scale will vary depending on site
- Floor plans for each level, at least 1/16” = 1’-0” scale
- Building elevations, match floor plan scale
- 2 sections, match floor plan scale
- Building perspectives (2 minimum)
- Design process images: sketches, concept development ideas
- Paragraph describing the student’s project and design concept (max 300 words), typed and attached to the board as part of the presentation

All drawings can be either hand drawn or computer-generated, but a successful presentation will include both mediums to explore their concept.

These are the minimum requirements, but more drawings and images may be included to better support the project and design.

Jamison Park Pavilion, Winston-Salem
Kenmore Hangar at Town Square, Washington
Tippet Rise Pavilion, Montana
Bamboo Amphitheater Space Structure, Brazil
BACKGROUND
Technologies advance; strategies evolve; students, parents and teachers face new decisions about curriculum. As education continues to progress, new models and spaces that will directly affect the learning process are needed. In addition to solving both current and yet-unknown educational demands, these innovations must also employ design strategies based on new insights into buildings’ effects on occupant health and performance, resource consumption, energy utilization, and community interaction.

The high school of the future must inspire learning and prepare students not just for tomorrow but the decades to come. As technology changes, testing requirements increase, and students have fewer decisions to make about their curriculum; new models and spaces are needed to make sure students are ready for their immediate and long-term futures and have the skills to prepare themselves for the steps which follow as well.

PROGRAM OVERVIEW
As those most impacted by current high school design, students are invited to reflect on these issues and propose the high school of the future. In addition to the typical school building blocks which make up the minimum design requirements (see program below), participants are encouraged to include additional, specialized program elements, based on personal interest, necessity or thoughts on future transformation of high school curriculum. A successful design will blend the basic requirements and any additional elements thoughtfully, seamlessly and playfully.

There are many different ideas for the high school of the future, as those most directly affected by the current model of a high school, we ask participants to propose how this future should look. To this end, the advanced High School of the Future program includes basic program elements...
required of all submissions, as well as suggested specialized elements to be incorporated into 
the overall program at the participant’s discretion. Participants do not need to include any of the 
suggested program and can alter the required program to fit their design. A successful design will 
propose a cohesive program mixing required and additional elements in a way which supports the 
participants’ vision of the future of education.

In addition to composing spaces and uses, the High School of the Future should be designed 
to operate as a building of the future. This could mean incorporating energy saving measures—
including PV panels, rainwater harvesting or using daylight in place of artificial illumination. Or 
mean exploring and incorporating biophilic design—mimicking nature in response to the brain’s 
preference for natural shapes, patterns, and rhythms—to improve student and teacher experiences. 
Emerging building technologies—such as high-performance concrete or cross-laminated timber—
could be included as well. Any of these elements—or others based on participants’ interests and 
research—should be incorporated into the building design.

**Program Breakdown**
The design should provide space for 600 students and include the following:

**Classrooms (~25 square feet per student)**
Participants should decide the size of the standard classroom, and the number of students it holds, 
based on their vision for the high school of the future

**Library**
- Circulation desk
- Media labs

**Auditorium**
- Designed for 1/3 of the student body (200 students)
- Lobby
- Media booth

**Gymnasium**
- 104’ x 140’ (14,560 SF)
- Refer to standard high school sports court & field dimensions linked below
- Locker rooms
- Weight room

**Cafeteria**
- Designed for 1/3 of the student body (200 students)
- Kitchen & storage

**Restrooms**
(continued on next page)
ADVANCED PROGRAM

Front office
- Reception area
- Staff offices
- Conference room
- Work room

Service spaces
- Loading dock
- Dumpsters
- Janitorial spaces
- Mechanical and electrical rooms
- Server room

Parking
- Bus lane
- Space for ~20 school buses
- Visitor parking
- Staff and student parking provided on adjacent site, as marked

Recreation fields
Shared with Davidson Fine Arts Magnet School

Beginner program
- Provide access to the beginner program portion of the site
- Provide exterior access to restrooms for community and after-hours events at the beginner program pavilion

Based on your ideas for the future of education, your design could also include the following:

Fine arts program
- Orchestra room (with office & storage; could be associated with theater / auditorium)
- Band room (with office & storage; could be associated with theater / auditorium)
- Chorus room (with office; could be associated with theater / auditorium)
- Theater room (with office; could be associated with theater / auditorium)
- Art classrooms
- Photography / journalism classrooms
- Media / computer labs

STEM program
- Labs / physical science classrooms
- Computer / media labs
- Maker space
- Small-group classrooms or breakout spaces
ADVANCED PROGRAM

Vocational / trade program
- Workshop space
- Teaching kitchen
- Garage & repair bays
- Small-group or presentation spaces
- Urban agricultural space

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Ruhehe Primary School; Ruhehe, Rwanda; MASS Design Group

Mwabwindo School; Mwabwind, Zambia; Selldorf Architects
PRESENTATION REQUIREMENTS
Student submissions should be presented on a maximum of four boards which are no larger than 20” x 30” each. Either portrait or landscape orientation is acceptable, but all board should be presented in the same orientation. The submission should describe the future of high school and communicate how the design addresses this future through all of the required presentation elements.

The minimum presentation includes:

Presentation board
No more than (4) 20” x 30” boards

Paragraph describing the project and design concept
No more than 500 words

Architectural site plan
Minimum scale: 1:40 (1” = 40’-0”)

Floor plan (of each floor of the proposed building)
Minimum scale: 1/16” = 1’-0”

Exterior elevations
Minimum scale: 1/16” = 1’-0” (scale to match floor plans)

Building sections:
Minimum scale: 1/16” = 1’-0” (scale to match floor plans)

Exterior perspectives

Interior perspectives

Design process images

All images can either be hand-drawn or computer-generated, but a successful presentation will include both mediums to explore their concept.

These are the minimum requirements, but more drawings and images may be included to better support the project and design.

REFERENCES
> High school sports field and court dimensions
> North Middlesex Regional School District: High school building project schematic design
> Edutopia: The architecture of ideal learning environments
EXISTING SITE PLAN | BEGINNER

SCALE: 1" = 80'-0"