

Central Indiana ASHRAE IUPUI Student Branch Competition

Purpose:

To introduce and promote ASHRAE and the Mechanical Building Systems Industry to students at IUPUI through the process of competing with other ASHRAE student members and from educational/promotional displays that will be constructed by the students.

Competition Overview:

The first round of the competition will be a written proposal that will be evaluated by professional Central Indiana Chapter members and engineers. Three teams will be awarded a \$250 scholarship to be used as they see fit and will be selected to move on to the second round. The second round will have the three teams produce a display and then present that display to a panel of judges made up of industry professionals and IUPUI faculty. Materials for the displays will be paid for by Central Indiana ASHRAE. One team will be selected as the winner and will be awarded a \$2,000 scholarship. At the completion of the student competition the IUPUI student chapter of ASHRAE will possess three physical displays to promote interest in ASHRAE at IUPUI.

Competition Instructions:

Phase 1

IUPUI students will form teams of two or three individuals. The students must provide proof that they are registered ASHRAE student members along with the written proposal. All teams will submit a written proposal 3 to 5 pages long describing their plan. The proposal should include a purpose statement, a description of the ASHRAE concept, description of materials, budget, attention grabbing features, and any other pertinent information. Include all pieces and parts required for a fully operational display. Sketches and/or diagrams may be provided to clarify the proposal. Hand sketches are acceptable. No physical display will be produced in Phase 1. The intent of the proposal is to convince the judging panel that the team's idea will most effectively educate the viewer and promote ASHRAE on the IUPUI Campus.

Phase 2

The goal of phase 2 of the competition is for (3) three teams to produce a physical display to introduce or clarify a concept related to the goals of ASHRAE. A concept related to Heating, Air Conditioning, Ventilation, or Refrigeration is expected.

The display could show for example:

- How a commonly used HVAC system works and why
- Describe in detail the operation of a specific building mechanical system or component of a system and give examples of it's application
- Show a simple economical payback analysis for certain type of HVAC system vs another
- Compare building energy consumed with and without a certain energy saving HVAC feature
- Show in detail how a building mechanical or HVAC system works
- The team is encouraged to find a topic relevant to their interests

Creativity is encouraged and the topic or concept does not have to be one of the above. The display should be simple and clear. An engineering student passing by should be able to review the display and understand the concept in 10 minutes or less. It should be attractive and designed to draw the attention of other students. Low voltage, battery powered (10 Watts or less) moving parts or lights may be used but are not required. The intent is to have a safe display that is not a fire or shock hazard.

In Phase 2 each of the three teams will build their proposed display. Up to \$750 will be available for materials to produce the display. Each team will have 20 minutes to present their display to the judging panel. The teams will be expected to describe the concept displayed and any workings of the display. They should explain the importance of the concept and how it may interest a student at IUPUI.

Additional Information:

A number of Central Indiana Chapter ASHRAE members will be selected as industry advisors. They will be available to help provide direction and technical help to the three finalist student teams.

ASHRAE publications, standards, and white papers are great resources that may be used to inspire an idea for the competition.

The display shall have a footprint no larger than 4' long x 2' wide x 6' tall. The display may be free-standing or intended for table top presentation.

Ties at any point in the competition will be decided by the Central Indiana Professional Chapter Board of Directors.

PHASE 1: Written Proposal Competition

Submissions Due: Friday, September 15th at 5pm

Winners will be selected and notified by: Monday, September 25th

Three Winners, \$250 scholarship, Advance to Second Round

Judging Criteria

1. Relevance to ASHRAE
2. Technical Content and Accuracy
3. Simplicity & Clarity
4. Feasibility and Budget
5. Originality

PHASE 2: Final Display Competition

Display presented to judges on this date: Wednesday, November 15th, 2017

Winning team will be selected on the day of the competition.

\$750 Budget to build display

\$2,000 scholarship for the final winning team

Judging Criteria

1. Relevance to ASHRAE
2. Technical Content and Accuracy
3. Simplicity & Clarity
4. Quality
5. Attractiveness of Display