Secondary Student Architecture Competition

Synergis Engineering Design Solutions invites students in architecture, engineering & construction to participate in a **secondary student competition** on The Architecture and Engineering of a sustainable building. The competition is seeking innovative proposals, committed to a strategy of implementing architecture founded on principles of green building, sustainability and sensitive to the natural environment. Projects must lead through their architecture to sensitivity, awareness, understanding, enthusiasm and commitment to the natural environment around them.

The student competition calls for submission designs for a **community center** of approximately 40,000 square feet. Judged topics of interest include achieving sustainability through integrated design, construction and operation of buildings; energy generation, conservation; health issues; climate issues; water and wastewater management; assessing building sustainability; material choice and selection; aesthetics, design vs. operation, ways to achieve net zero-energy buildings and the capable use of the Autodesk Revit Architecture software. Preference will be given to projects that demonstrate innovation and design excellence.

Submission will be in the form of an Autodesk Revit format (.RVT) file, saved to a disk and sent to Synergis so it is received no later than April 1. Although not required, submissions can also include analytical data, simulation results supporting evidence of sustainable design, renderings & presentation material explaining the submission design.

Send to:

Synergis Engineering Design Solutions
Christina Green
472 California Road, Suite 100
Quakertown, PA 18951

Entries will not be accepted after April 1, 2012.

Each participant will:

- Work within the defined project location, set forth by Synergis, at the corner of 4th St. North and East Mill St. in Quakertown (18951), across the street from the Bucks County Free Library. Find the aerial picture here. Assume the site is flat.
- Use Autodesk Revit software to design and deliver their entry.
- Basketball court plus bleachers. The bleachers are to be positioned on the two long sides of the court with nine rows of benches on each bleacher.
- At least include spaces for the basketball court outlined above, but also for entry & circulation, administration, mechanical equipment, restrooms, a meeting room,

storage, parking and other spaces as the student deems appropriate. Provide multiple points of egress and handicap accessibility.

- Work individually or in teams up to three people.
- Provide contact for verification that the participant is currently a student.
- The entry must be original work, (no plagiarism please).
- The Revit model will be explored by the judges in 3D, so be sure to include a fairly complete three dimensional model of the building.
- Design Notebook will be required to show to outline the design process that produced the drawing. You may include any or all of the following:
    - Original sketches or ideas
    - If you worked as a team, who are the people on your team and who contributed to which parts of the design process.
    - Explanation of materials, systems, design ideas, etc. and how you chose them
    - General process of the design
    - Your own ideas and creativity

Prizes

In addition to recognition for their accomplishments, winning projects will receive monetary awards as follows.

- First Place: $1,000 to split among the team, a chance to present their project at Synergis University on May 16th, have their designs on the website and at Synergis University
- Second Place: $500 to split among the team, have their designs on the website and at Synergis University
- Third Place: will have their designs on the website and at Synergis University

Criteria for Judging

In addition to our judges this year, we wanted to open it also to the public. So our engineers will pick their top 3 entries that meet all the requirements in the criteria and then we will post them onto the Synergis Education Community for Engineering and Design Facebook page. The most votes will weigh 50% and our judges' choices will weigh 50%.

Competition schedule

The proposed schedule for the competition is as follows:

- November 1, 2011: Competition registration begins.
- March 1, 2012: Registration forms required.
- April 1, 2012: Submissions required.
- April 10, 2012: Submissions added to website.
- May 1, 2012: Winners announced.
- May 16, 2012: Synergis University – First place is offered a time to present their project