



SYNERGIS®

Engineering Design Solutions

Synergis-F1 Design Competition

Open to all secondary schools in Pennsylvania and New Jersey

(Participation in the F1 Competition and actual productions of the car is not required)

Team/project rules

Teams must follow the 2011-12 Pennsylvania F1 rules. This year's rules have not yet been released, however we fully expect the rules to be similar to the ones from last year. You can find last year's rules [here](#). Participation in the F1 Competition and actual build of the car are not required to enter in the Synergis F1 Design Competition.

Criteria

Your team **must** comply with the [Official PA F1 rules](#):

- Your team must contain a minimum of 3 to a maximum of 6 students.
- Your team must use 3D CAD (Computer Aided Design) software to produce your ideas and model them in 3D.
- Each team must produce a Design Portfolio, following the official PA F1 Rules - **maximum 20 pages (11" x 17")** - **Please note:** 20 pages includes front and back pages. Portfolio can be 20 single sided or 10 double sided pages.
- All aspects of this engineering and industry partnership should be represented in the team's portfolio. This includes CAD designs and the creation/production of the portfolio, which should remain the responsibility of the students in the team.
- The Portfolio must include two to four 2-dimensioned 3rd angle orthographic projection drawings and one or more rendered images of their final car design. Animations of the final design are optional.

Suggested content for the Design Portfolio:

- How the team has performed.
- A Business/Marketing plan - that was used to secure team sponsorships/funding
- As a team and individuals, how have you benefited from the F1 in Schools experience/what have you learned /how has it changed your life.
- Decision on job roles/teamwork
- Explanation on each area of the challenge. (Design, Analyze, Test)
- How was the design agreed upon.
- Software used.
- Engineering the car.
- Uniqueness of the team.
- Collaboration with industry/higher education.
- Evidence of Testing your design (CFD software, wind tunnel, etc.)

Judging criteria

This year we are introducing a new judging process. Our engineers will pick the top 3 designs and we will post all three to the Synergis Education Community for Engineering and Design on Facebook. The final judging will be 50% dependent on the quantity of votes received on Facebook and 50% our engineer's decision.

Our Engineers will judge based on:

1. Design ideas
2. Actual design
3. How well intent is realized in the design
4. Meeting the requirements of the project rules

Prizes

First Place: \$1000 cash to split among the team, ability to present at Synergis University on May 16, 2012, work will be posted to our website, invited to attend Synergis University

Second Place: \$500 for the second place team, work will be posted to our website, invited to attend Synergis University

Third Place: Work will be posted to our website, invited to attend Synergis University

Deadlines:

November 1, 2011: Registration Opens

March 1, 2012: Registration Forms required

April 1, 2012: Entries required.

April 16, 2012: Top three posted to website

May 1, 2012: Winners announced

May 16, 2012: Synergis University

All Design Portfolio entries must be received, in digital format, by April 1, 2012.

Send all entries to:

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

Entries must be received no later than April 1, 2012. Failure to submit the portfolio on time will eliminate you from the competition.

