

Michigan Technological University

2010 PACE Competition

ENG 1102 Teams

The **PACE Design Competition** will judge five critical areas of your design project:

1. Form --- Design Concept, Creativity, Perceived Value, Safety
2. Fit --- Physical Model (realism, aesthetics, detail, supporting design)
3. Function --- Design Parameters and Performance (math models, simulations, spreadsheets, etc.)
4. Presentation --- Effective, Professional, Credible
5. Teamwork and Collaboration

Final judging will focus on the UG model and design parameters; i.e., a Matlab simulation is not required for this competition, but some form of "functional modeling" (spreadsheet, simulation, calculations, etc.) will be helpful in presenting a convincing case for how your design will perform.

To enter the competition, teams will submit four to six UGNX screen printouts of their design to their ENG 1102 instructor. Teams will choose what views they want to show ... some suggestions are:

- overall isometric views
- internal view or possibly transparent views
- drawing showing the overall dimensions
- zoomed-in view showing interesting detail
- other supporting materials (configuration diagrams, roadway drawings, process charts, project management tools, etc.)

2010 PACE Time Line

Prior to Week 10: Teams will work on their UG models and design projects as directed by their instructor and consider entering the contest. Teams should discuss this so they are ready to submit during week 10. Direct any questions about the competition to your instructor.

Week 10: Submissions due from all participating teams by the end of the week (as defined by your instructor). Turn in to your instructor. 16 semi-finalists will be chosen and notified

Week 11: Eight finalists will be chosen and notified.

Week 14: Finalist Presentations on Tuesday 20 APR; see details on next page.

Finalist Presentations

The 8 finalist teams will be assigned to one of two time periods (four teams each). Teams will take turns presenting their project concepts to the PACE judges. You will have eight minutes for your presentation plus four minutes question and answer. The judging criteria are:

- Model appearance --- realism, aesthetics, detail
- Design Creativity
- Perceived Value (could someone actually use the concept)
- Credibility (how will your design function, basis for product claims, confidence in presentation, etc.)

Each team member competing in the Pace Competition will need to sign an agreement allowing Pace Partners to use their design and presentation materials.

Agenda for PACE Finalist Presentation Day: April 20, 2010

NOTE: Team presentations are split into two sessions. Teams need to stay for the full session that they present in. There is plenty of room for those who want to stay for the other session and teams are encouraged to do so if the schedule permits.

Teams must turn in a jump drive with their PowerPoint presentation, UGNX models and any other files that they think they may need for presentation and answering questions. Teams **MUST** turn in their presentation flash-drives by 5:00p.m., MON 19 APR. Give them to Tina in 112 Dillman Hall.

Proposed Schedule Spring 2010 MTU PACE Competition ENG1102, Engineering Modeling and Design

- noon – Lunch for on-site judges and faculty in MUB
- 1:00 p.m. – Dow 642, set up technology & load all presentation files to projecting computer (meet-me-line for teleconference & LiveMeeting web meeting)
- 1:15 p.m. - Introductions of judges & participants
- 1:30 – 2:30 p.m. - First 4 teams present (15 minutes each)
- 2:30 – 2:45 p.m. - Set up for second group of teams and Introductions of Judges
- 2:45 – 3:45 p.m. - Second Group of Four Presentations (15 minutes each)
- 4:00 - 4:15 p.m. - PACE video while Judges "convene" for awards.
- 4:15 - 4:30 p.m. - Awards, comments from judges, photos
- 4:30p.m. - Pizza in Dow 642 --- for all teams, faculty and judges.