

Delaware Bridge Design Competition

Suggestions and Helpful Hints



Preparing for the Delaware Bridge Design Competition

Team Formation and Structure

- **Form a Team:** Gather a group of interested students or friends. It's recommended to limit team sizes to three (3) students for an effective and competitive package. Teams of two (2) to four (4) are permitted. Each team must include at least one teacher or adult advisor, who may support multiple teams.
- **Mentorship:** Teams are eligible for mentorship from industry professionals, which provides additional engineering and competition-specific guidance without replacing the advisor's role.

Project Preparation

- **Understand the Guidelines:** Familiarize yourself with the competition guidelines and rubrics, as they contain critical information for achieving the best results. Non-compliance can lead to decreased scores or disqualification. For clarification, reach out for additional help.
- **Plan Your Timeline:** Ensure all team members are aware of key dates for submission of proposals and competition day. Major development work should be completed ahead of these deadlines to facilitate participation and success.
- **Maintain Records:** Keep detailed journals, records of meetings, and working drawings. Distributing tasks among team members fosters responsibility and allows for peer reviews of sections of the final presentation.

Adult Guidance

- **Role of Adults:** Adult involvement should focus on mentoring and providing basic guidance, including:
 - Teaching applicable engineering, mathematical, and scientific principles.
 - Guiding research efforts.
 - Assisting in proposal production and presentation.
 - Overseeing construction stages.
- **Encourage Student Initiative:** Adults should ask leading questions to promote creative thinking and encourage students to explore credible resources. Encourage testing and iterative design improvements, starting with rough prototypes.

Presentation Preparation

- **Anticipate Questions:** Prepare for potential questions at the end of your presentation. Common topics include:
 - Choice of design
 - Safety considerations in balsa and real-world bridge building
 - Importance and impacts of bridges
 - Lessons learned through the competition
 - Civil engineering careers related to bridges
- **Stay Organized:** Keep track of time limits for both project development and the presentation.
- **Seek Help When Needed:** Don't hesitate to ask questions. Please contact:
 - Nicholas Dean at Nicholas.Dean@delaware.gov
 - Please CC the following individuals:
 - Marie Burns at Marie.Burns@delaware.gov
 - Paul Huhn at Paul.Huhn@delaware.gov
 - Marc “Gus” Toussaint at Marc.Toussaint@delaware.gov
 - Lucy Xu at Lucy.Xu@delaware.gov
 - Eric Yoder at Eric.Yoder@delaware.gov
- **Engage with Mentors:** Your mentors can address many of your questions and provide valuable insights.
- **Research Bridges:** Explore bridges locally and globally to inspire your designs.
- **Study Key Concepts:** Conduct thorough research on relevant topics and engineering principles to inform your project.

By following these guidelines and preparing diligently, your team will be well-equipped to compete successfully in the Delaware Bridge Design Competition. Good luck!