

ENGINEERING DESIGN CHALLENGE



Engineering

A Team of up to: 3 per school

Are you ready to put your creativity and problem-solving skills to the test? Get ready for an exciting Engineering Design Challenge Contest where you'll work with your team to tackle a real-world problem and come up with innovative solutions. Here's everything you need to know:

1. What's the Challenge?

- We will present you with a unique problem that needs solving, and it's up to you to create a working solution using the engineering design process. This is your chance to apply what you know and explore new ideas!
- Your Task will be presented at STEAM Olympiad.

2. Contest Guidelines

- Design Constraints: Every project has its limits! Your solution must stay within certain constraints, including:
 - Materials: You'll receive a limited set of materials to work with—so use them wisely!
 - Time: You'll have a set amount of time to complete your design and submit it for testing.
 - Size or Cost: You'll be provided size and cost guidelines at STEAM Olympiad.

3. The Engineering Design Process

- Step 1: Ask: Dive into the problem—what needs to be solved, and what are the key questions?
- Step 2: Imagine: This is where the fun begins! Brainstorm as many ideas as you can, no matter how wild.
- Step 3: Plan: Choose the best solution, sketch your idea, and develop a strategy to bring it to life.
- Step 4: Create: It's time to build! Use your materials to make a prototype based on your plan.
- Step 5: Test: Test your design and see how well it works. Don't worry if it doesn't work perfectly—this is just the beginning!
- Step 6: Improve: Evaluate what can be better and refine your design to make it stronger, faster, or more efficient.

4. Teamwork and Collaboration

- Bring your best team spirit! You'll be working in groups, so make sure everyone participates and shares ideas. Whether you're brainstorming, building, or testing, teamwork is key to success.