

Maryland Engineering Challenges™ INFORMATION SHEET

Participating During a Pandemic

How to Start:

- 1. Choose a challenge!
 - a. Four Elementary School challenges--Paper Airplane (1st-5th Grade), Safe Racer (2nd-3rd), Hovercraft (5th-8th), and Straw Bridge (5th-8th)
 - b. Four Middle School challenges--Future City, Straw Bridge, Hovercraft, and Robot
 - c. Three High School challenges--Robot, Wood Bridge, and Cargo Ship
- 2. Review the guidelines for your challenge as some of the challenges are allowing individual students to compete instead of with a team due to the restrictions in gathering during the pandemic.
- 3. Form a team, depending on the challenge, with either one student and an adult coach, or several students with an adult coach.
- 4. Discuss how the team will communicate to complete the project:
 - a. Follow CDC and state guidelines to work safely during the pandemic.
 - Use video conference platforms to meets as a group--Zoom, Google Hangout/Google Meets, Webex, or Skype
 - c. Plan the timing and assignments for the project in accordance with due dates
 - d. Use project collaboration sites to track group work and progress and to keep project records--Google Docs, ClickUp, Figma, Trello, and Wrike
- 5. Research, plan, design, and build--consult library and online resources to support the project, plan team assignments, design the project collaboratively, and test and improve the design continuously.

Note to Adults:

- The Maryland Engineering Challenge organizers would like to stress that the majority of the work on all phases of the project is to be done by the students. Though, we recognize during this pandemic, students may need more help than usual.
- Adult assistance is to be limited to: mentoring students; teaching principles
 applicable to the project; assisting in production of the report and drawings;
 overseeing manufacturing of the project; performing any process that may pose a
 safety hazard to students (taking due account of their ages).
- Guidance should be in the form of questions (leading questions, if necessary) to promote creative thinking by the students.
- Consider attending the **Coaches' Information Session**: This "drop-in" virtual event hosted on Zoom is designed for adults interested in coaching a team to chat with engineers. Find out if a particular Challenge is a good fit for your student(s). Attendance is strongly encouraged. Contact Jessica at challenges@thebmi.org with any questions

WHEN: Wednesday, October 14, 2020, 2 sessions-- 3:30-4:30 & 6:30-8:30

WHERE: https://bit.ly/2022MECInformationSession