

## OTHER IMPORTANT DATES

### Coaches' Information Session

Thursday, May 26, 2016  
4:00 p.m. to 7:00 p.m.

OR

Thursday, November 17, 2016  
4:00 p.m. to 7:00 p.m.

Interested in the Challenges but not sure what to do? Drop in throughout this evening and learn more! Meet the engineers who judge each Challenge. They will answer questions, explain the requirements, and demonstrate past projects. A great way to select the best Challenge for your team! The Information Session is not required and there is no cost to participate. Registration is strongly encouraged, contact [jkeffer@thebmi.org](mailto:jkeffer@thebmi.org)

### Coaches' Hands-On Workshop

Saturday, January 28, 2017  
10:00 a.m. to 2:00 p.m.

Learn the practical aspects of select Challenges! Work with engineers to explore the design and construction aspects of a project. Especially helpful for first-time Coaches and/or those with little previous engineering knowledge. This Workshop is not required and there is no cost to participate. Registration is required prior to 1/25/17. Contact [jkeffer@thebmi.org](mailto:jkeffer@thebmi.org)

**Check individual Challenge guides  
for participation details  
or visit [www.thebmi.org](http://www.thebmi.org)**

# MARYLAND ENGINEERING CHALLENGES - 2017 -

Future City	January 21
Wood Bridge	February 4
Cargo Airplane	February 5
Paper Airplane	February 12
Theme Park	February 18
Safe Racer	March 11
Hovercraft	April 22 at MSU
Robot	April 22 & 23
Cargo Ship	April 23
Straw Bridge	April 29

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1415 Key Highway, Baltimore MD 21230  
[www.thebmi.org](http://www.thebmi.org) 410.727.4808

**BALTIMORE  
MUSEUM<sup>OF</sup>  
INDUSTRY**

# MARYLAND ENGINEERING CHALLENGES - 2017 -



### **Paper Airplane**

Grades 1 to 5

Design a paper airplane to safely fly a paper-clip “passenger” as far and accurately as possible.

### **Theme Park**

Grades 4 and 5

Construct a moving theme park ride, based on a literature curriculum reading.

### **Safe Racer**

Grades 2 and 3

Build a safe and speedy car to allow the “driver,” Eggbert[a], to survive a crash test and distance trial.



### **Future City**

Grades 7 and 8

Design a city of the future using SimCity software and create a model of one area.

### **Cargo Airplane**

Grades 6 to 8

Construct an electric airplane to fly tethered flights with and without cargo.

### **Hovercraft**

Grades 6 to 8

Build the fastest hovercraft to travel across the “Chesapeake Bay.”

*Challenge takes place at Morgan State University*

### **Straw Bridge**

Grades 6 to 8

Construct a plastic straw bridge to support a scale model truck for one minute.



### **Cargo Airplane**

Grades 9 to 12

Construct an electric airplane to fly tethered flights with and without cargo.

### **Wood Bridge**

Grades 9 to 12

Design a structurally efficient bridge to hold the maximum load before breaking.

### **Robot**

Grades 9 to 12

Construct a two or four leg robot to walk under direction over uneven terrain.

### **Cargo Ship**

Grades 9 to 12

Design and demonstrate a ship to carry containerized cargo over a water course.

