



## **2023 SAME Undergraduate Innovation Design Challenge A Design Project Competition**

SAME student members represent the next generation of innovative STEM thinkers ready to take on society's challenges. For this reason, the Society is proud to announce an undergraduate innovation challenge to identify and recognize the next great ideas.

### **Introduction**

The Innovation Design Challenge encourages students to submit projects that illustrate an innovative solution to an engineering problem. It is expected that projects submitted for consideration will be of the caliber used for a Senior Design or Capstone project.

Submissions in this competition will be evaluated on how well they convey the purpose of the project and its technical merit. Teams of 3-5 members will concisely communicate their design process and demonstrate that they have used sound analysis throughout and do so in a way that is easily understandable to technical and non-technical audiences. This document will outline the expectations for each team and submission as well as the grading rubric that will be used to evaluate the work.

First place teams will receive \$600 per member  
Second place teams will receive \$500 per member  
Third place teams will receive \$400 per member

### **Team Requirements**

All team members must be undergraduate-level students AND student members of SAME. Student membership in SAME is free to all students through the undergraduate level. For more information about joining SAME as a student member, go to: [Student Membership - SAME](#).

Team can have between 3-5 members. Expected submission topics will be based on capstone or design projects. All submissions must include the names of each of the team members, emails, year, and SAME membership number.

### **Submissions**

#### **Phase 1 – Abstract Submission – 300-500 words**

The abstract should summarize the key concepts, purpose, initial conclusions, and an overview of the science or engineering principles and results from your work. The online submission form can be found here:

<https://same.secure-platform.com/a/solicitations/54/home>. Abstracts will be evaluated and teams advancing to Phase 2 will receive notification.

## **Phase 2 – Video Presentation Submission**

The presentation will consist of a 5-10 minute MP4 video with audio. It should discuss the progression of the design project from concept and design, to planning, to analysis, and finally to the project build itself (or calculated results if the capstone project does not involve any physical construction). Additional details on areas to expand on are included in the Submission Rubric section. Detailed instructions will be provided to teams advancing to Phase 2.

### **Submission Rubric**

<b>Category</b>	<b>PTS</b>
The team described their design project well and concisely	10
The team described their engineering analyses in an appropriate level of detail	10
The team followed a systematic process for evaluating and selecting their final concept	10
The team described their build process and project development well	10
The team accurately described/presented their final project well	10
The team provided an appropriate level of engineering analysis and technical detail	10
The project provides an innovative solution to an engineering problem	10
The project describes/resulted in a highly marketable product	10
The structure and grammar of the submission was professional	10
The team exhibits professionalism in appearance and communication	10
<b>TOTAL</b>	<b>100</b>

### **Timeline**

23 February: Phase 1 Abstracts due  
6 March: Teams advancing to Phase 2 notified  
23 March: Phase 2 Video Presentations submitted  
10 April: Results announced

### **Awards**

1<sup>st</sup> Place: \$600 per team member  
2<sup>nd</sup> Place: \$500 per team member  
3<sup>rd</sup> Place: \$400 per team member

### **Selection**

The review committee will be composed of SAME industry and government members, and members of the College Outreach Community of Interest.

### **Questions**

If you have any questions about the competition or how to submit, please contact Jeannine Finton, SAME Sr. Manager, at [jfinton@same.org](mailto:jfinton@same.org).