



ASME Oregon Section Capstone Project Prize Competition 2017

The Oregon Section of the American Society of Mechanical Engineers is proud and honored to recognize the achievements and hard work of college seniors in completing their capstone projects.

A committee of volunteer judges will score each group using the following evaluation criteria. The winning team will be awarded \$250 per person (up to \$1000 per team) and complimentary ASME membership. Teams are also eligible to receive a new award that we have created this year, the ASME George Kent Capstone Recognition Award.

Winning teams are asked to present at the ASME Oregon Section Turnover Dinner, where they can network over dinner and drinks with professional engineers and industry leaders.

Teams will be judged on the complexity of problems tackled, creativity of solutions, engineering methods, project management, and the communication of their designs. We are judging the team, not the “wow” factor of a cool new product. If your team demonstrates aptitude, professionalism, commitment, and planning, you will be successful—both in this competition and in your career.

Judges will use a simple 1-5 rating scale using a rubric consisting of the following six categories:

1. Appearance and Preparedness

- Is the group prompt and ready to present? These presentations simulate a kind of real world scenario in the engineering industry: Talking to the CEO or VP of an organization who does not have a lot of time to spend before a decision is made on the project.
- You’re competing for \$1000, dress professionally

2. Presentation Organization

- The presentation should be clear and concise to the judges.
- Thoroughly describe issues so that judges can understand the nature of the project.
- Effective use of time and communication: Rehearsed presentations often score much higher because there is a limited time to get the important subjects communicated.

3. Strategy and/or Anticipated Success

- Judges are made up of ASME members, who will use their experience and what they observe to evaluate the “risks and measures” taken by the team to meet the objective and timeline of the project.

4. Group Participation

- This is not just an opportunity to win money, but also a learning and networking opportunity. Maximizing group participation is essential. It is strongly recommended that multiple students present some portion of the presentation.
- Balance the number of presenters with the topics covered; do not rotate through with one sentence each. It is okay if there is a team leader, but all must show effort.
- Ensure that everybody rehearses their part and that the group has rehearsed together.

5. Scope and Complexity of Work

- Judges will evaluate the labor, hands on skills utilized, and project management necessary to complete the project. Obviously, the more hands on experience performed by the group, the better the score. The judges will anticipate that some things may need outsourcing and will consider that as part of the project management tasks.
- Judges will evaluate the proper complexity of design and depth of analysis. The judges understand that some analyses are intended to show professors specific student competency.
- Overly complex designs may be downgraded if a simple and elegant way to solve the issue was bypassed.
- The proper process and original thought used in allocating and selecting materials is important.

6. On-Time and Within Budget

- In the real world, these two concepts often matter more than anything else—did you finish the project?
- Groups will not be penalized for setbacks due to the novel nature of their project or failures due to unforeseen design flaws. However, issues that could have been easily prevented or predicted will be judged critically.
- What is more important is that the group demonstrated and discussed planning and contingency efforts for mitigating slip, creep, and budget overruns.