

Inaugural Engineering Speaking Competition 2016  
Hosted by Illinois Engineering Ambassadors  
Rules



**Contents**

General Information	2
Competition Structure	2
Entry and Eligibility Requirements	2-3
Prizes	3
Judging Criteria	3-4
Submission Guidelines and examples	5

For updated competition information, visit <http://ambassadors.engr.illinois.edu/events.html>.

## **General Information**

The inaugural Engineering Speaking Competition seeks to recognize University of Illinois engineering students who are excellent technical communicators. By recognizing these students in a public competition, Engineering Ambassadors seeks to show that University of Illinois students defy the stereotypes that engineers are poor communicators. The competition will consist of two rounds, with the final round being held on Saturday, April 16, 2016 from 3-5 PM.

Contestants will display mastery over communication by creating a talk that addresses the prompt: "Describe an engineering solution to a societal problem." There are no limits on what problem can be chosen, but the talk should present a clear engineering solution to the societal problem. Excellent presentations will demonstrate a firm understanding of the engineering principles underlying the societal problem and the engineering techniques involved in your solution. Competitors do not need to be the unique inventor of the solution, but should credit sources and present information in a new and engaging way.

To create the talks for this competition, competitors should draw inspiration from TED talks. TED talks are a good representation of the technical content, uniqueness, speaking prowess, and varied formats that this competition strives to achieve. There are various acceptable formats for the talk, but all should have a strong verbal and nonverbal communication elements. Visual aids and presentation slides are permitted but not required. If slides or visual aids are used, they will be judged with the same judging criteria as the verbal communication element (described by the rubrics provided in the Judging Criteria section). Contestants who advance to the final round will be given the opportunity to receive feedback on their slides and visual aids.

By applying to the competition, competitors agree that the talk submitted is their own unique work that does not consist of plagiarized material. To this end, competitors should cite sources as appropriate. Competitors should also refrain from blatant personal or corporate promotion.

For updated information on the competition, visit <http://ambassadors.engr.illinois.edu/events.html>.

## **Competition Structure**

The Engineering Speaking Competition will consist of two rounds. In both rounds, contestants will be speaking to the prompt: "Describe an engineering solution to a societal problem."

The first round is a qualifying round, in which interested competitors will submit an online application that consists of questions regarding interests and qualifications. A 1-3 minute video of them giving the introduction of the talk is also part of the application. The responses should demonstrate a passion for engineering and challenging the stereotype that engineers are ineffective communicators. The introduction videos should highlight the poise, passion, and speaking skills of the competitor. The deadline to enter is 11:59 PM on Sunday, April 4, 2015. On April 6, competitors will be notified whether they have graduated to the second round.

The final round will consist of competitors giving a 7 minute talk and will be held on Saturday, April 16 from 3-5 PM. The winners of the competition will be announced at the conclusion of this event. This 7 minute talk will build upon the 2 minute introduction submitted in the first round. Contestants who progress to the final round will receive feedback on their introduction and have the opportunity to receive feedback on any visual aids or presentation slides. Minor changes to the introduction of the talk are permitted, although the topic of the talk must stay the same.

## **Entry and Eligibility Requirements**

Any current University of Illinois student studying an engineering discipline is eligible to enter. This includes both undergraduate and graduate students, any student in the College of Engineering, and additionally students in Chemical Engineering and CS through the College of Liberal Arts and Sciences.

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Interested competitors can apply to the first round of the competition using [this form](#).

### Prizes

The winners of the Speaking Competition will receive cash prizes in the form of Visa gift cards for the following amounts:

1st place: \$200  
2nd place: \$100  
3rd place: \$50

### Judging Criteria

The first round of the competition will be judged by current active class of Illinois Engineering Ambassadors. These undergraduate engineering students are training in technical communications. In this round, the 250 word summaries will be judged for their 1) organization, 2) content, and 3) clarity. The 2 minute introduction videos will be judged for their 1) organization, 2) elocution, 3) poise, 4) enthusiasm, and 5) creativity. Excellent first round applications will display the following traits:

Trait	Description
Organization	Students present information in logical, interesting sequence which audience can follow. Feels like a story of the project. Students present information in logical sequence which audience can follow. Audience has difficulty following presentation because students jump around. Audience cannot understand presentation because there is no sequence of information.
Elocution	Students use a clear voice and correct, precise pronunciation of terms so that all audience members can hear presentation. Pace is appropriate for all speakers. Limited use of filler words (“umm,” “like,” etc.).
Poise	Students display relaxed, self-confident nature about selves, with no mistakes.
Content	Introduction is attention grabbing, addresses audience at an appropriate level (rigorous, but generally understandable), material is relevant to overall purpose, there is an obvious conclusion or take home point.
Enthusiasm	Demonstrates a strong, positive feeling about topic during entire presentation.
Creativity	Very original presentation of material; captures the audience’s attention.
Clarity	Technical information is made clear. Text is minimal on slides. Visual aids are well prepared, informative, effective.

The final round of the competition will be judged by a panel consisting of one representative of the College of Engineering, one communication professional, and one practicing engineer. This round will be judged according to the rubric below.

Engineering Speaking Competition Rubric

TRAIT	Superior	Adequate	Developing	Inadequate
ORGANIZATION	Students present information in logical, interesting sequence which audience can follow. Feels like a story.	Students present information in logical sequence which audience can follow.	Audience has difficulty following presentation because students jump around.	Audience cannot understand presentation because there is no sequence of information.
ELOCUTION	Students use a clear voice and correct, precise pronunciation of terms so that all audience members can hear presentation. Pace is appropriate for all speakers. Limited use of filler words (“umm,” “like,” etc.).	Students’ voices are clear. Most audience members can hear presentation. Pace is appropriate. Some use of filler words (“umm,” “like,” etc.).	Students incorrectly pronounce terms. Audience members have difficulty hearing presentation. Pace varies by speaker. Long pauses are distracting	Students mumble, incorrectly pronounce terms, and speak too quietly for a majority of students to hear. Pace varies by speaker.
POISE	Students display relaxed, self-confident nature about selves, with no mistakes.	Make minor mistakes, but quickly recover from them; display little or no tension.	Display mild tension; have trouble recovering from mistakes.	Tension and nervousness is obvious; have trouble recovering from mistakes.
CONTENT	Introduction is attention grabbing, addresses audience at an appropriate level (rigorous, but generally understandable), material is relevant to overall purpose, there is an obvious conclusion or take home point.	Introduction is attention grabbing, attempts to address audience at an appropriate level but some technical terms are not defined, take home message is clear on some slides.	Introduction is weak, mismatch of level, technical terms are not defined, there is no obvious take-home message.	The introduction does not inspire attention, material seems strung together with no relation to purpose of presentation.
ENTHUSIASM	Demonstrates a strong, positive feeling about topic during entire presentation.	Occasionally shows positive feelings about topic.	Shows some negativity toward topic presented.	Shows absolutely no interest in topic presented.
CREATIVITY	Very original presentation of material; captures the audience’s attention.	Some originality apparent; good variety and blending of materials / media.	Little or no variation; material presented with little originality or interpretation.	Repetitive with little or no variety; insufficient use of materials / media.

Other items:

- Text is minimal on slides.
- Visual aids are well prepared, informative, effective, and not distracting.
- Speaker is able to answer questions professionally.

Comments:

## Submission Guidelines and examples

This competition offers interested competitors significant freedom in the topic of the talk (as long as it responds to the prompt: "Describe an engineering solution to a societal problem") as well as the format of the talk. As such, several examples of excellent technical communication are provided below. These talks should serve as inspiration for the level of technical content and caliber of speaking that we are looking for. You should not feel limited to the formats or topics of these examples.

- Topics that respond to the prompt: "Describe an engineering solution to a societal problem"
  - The National Academy of Engineering's [Grand Challenges for Engineering](#).
- Titles of successful talks in a sister competition held at Pennsylvania State University in 2013.
  - "Immunotherapy to Treat Cancer" (bioengineering)
  - "Improving Cancer Diagnoses with Supercomputers" (mechanical engineering)
  - "High-Speed Rail for Sustainable Transportation" (chemical engineering)
  - "Using TV White Space Bands for Wi-Fi Traffic" (electrical engineering)
  - "Miscanthus as a Biofuel for the Northeast U.S." (biological engineering)
  - "Addressing Age-Related Macular Degeneration Vision Loss with Telescope Prosthetics" (mechanical engineering)
  - "Mitigating Urban Heat Islands with Green Roofs" (architectural engineering)
  - "Protecting New York City from Storm Surges" (civil engineering)
- [Assertion evidence](#) as a method of effective technical communication.
- Example talks from a sister competition held at Pennsylvania State University in 2013.
  - [1st place talk](#). The first few minutes of this talk represent what we are looking for in the 1st round introduction video.
  - [Excerpts](#) of various talks from the final round.
- Some TED Talks for inspiration
  - [The transformative power of classical music](#)
  - [Biomimicry's surprising lessons from nature's engineers](#)
  - [Your body language shapes who you are](#)