



# ENGINEERING EXPO IX

**FRIDAY, MAY 3, 2024**

CENTENNIAL ENGINEERING CENTER

**1-4 p.m.**

ELEVATOR PITCH CONTEST

•  
POSTER COMPETITION

•  
NETWORKING OPPORTUNITIES

ENGINEERING EXPO IS AN ANNUAL EVENT THAT SHOWCASES OUR OUTSTANDING SENIOR STUDENT CAPSTONE PROJECTS TO OUR CORPORATE PARTNERS AND OTHER STUDENTS AND FACULTY. MEET SOME OF OUR BRIGHTEST STUDENTS WHO ARE POISED TO MAKE AN IMPACT IN THE WORLD OF ENGINEERING.

## QUESTIONS?

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## **Engineering Expo IX Prizes\***

### **Poster:**

1st -\$1000, 2nd -\$500, 3rd -\$250

### **Pitch:**

1st -\$1000, 2nd -\$500, 3rd-\$250

\*prize money to be split amongst participating team members

## Engineering Expo Pitch Competition

**Date: May 3rd 2024**

**Time: 2:00pm-3:30pm**

**Location: CENT 1041 (STAMM Auditorium)**

**Who: Capstone Senior Engineering Design Teams**

Timing: 3-minute presentation, MS PowerPoint slides required for presentation and Q&A. 1-minute between presentations for transition and group photo. Arrive early to load your presentations on the presenter's computer in the auditorium.



**Pitch Coaching Session** to be held in person on Friday April 26<sup>th</sup> at 2:30-4pm, location TBA. Members of teams or designated spokespersons are encouraged to attend. Additional points will be given in the 'Who is the Team' category of the judge's *pitch evaluation sheet* to teams who participate in the coaching session.

Additional tips from Industry Partners

1. Like Shark Tank you'll have the listeners' attention for the first 45 seconds. But during that period, you need to engage them and then hold onto them, or they'll be checking their phones. So, you will need to make the most of your words. Some experts say one can comfortably speak at 170 words per minute, while others suggest 125/min is more powerful. That bounds your 3-minute talk at 375-510 words. Write them out and practice them so you finish comfortably within three minutes. And don't rush, many people find fast talkers to be annoying. Refine your message down to fewer words rather than talking fast.
2. Consider organizing your presentation and budgeting your time something like:
  - i. Introduce your team, topic, department 15 seconds
  - ii. Describe the need your project addresses 60 seconds
  - iii. Describe your project 75 seconds
  - iv. Next Steps 30 seconds
3. Keep it high level but wet your listeners' appetite and leave them interested and wanting more.
4. Be passionate – you've poured considerable effort into this, show us that you care and why.
5. Clear, simple images can be powerful and efficient tools to convey information and energize listeners. The following page has suggestions to give your visuals punch. Work out the technology in advance so your visuals do not delay the start of your presentation.
6. **The Need:** Your project should address a need. What is that need, why is it significant, how is it addressed now, and why is the current state of the art less than ideal?
7. **Project Description:** Describe your approach, how it works (high level), and why it's different from and better than the current state of the art. Include any market analysis and important project economics. Few of the listeners will be experts in your field, though some may be. What you say must make sense to the

experts, but you won't have time to explain the details to lay people. Instead give them the big picture and leave them wanting more. Be enthusiastic and say what's unique about your approach but keep the entire project description to no more than 75 seconds.

8. **Next Steps:** You've got the listeners' attention, now:
  - a. Tell them what your next steps will be and how the project will benefit society, or
  - b. Ask them to invest to help bring your idea to market and give them 1-3 clear reasons why, or
  - c. Ask them for their vote as best presentation and give them 1-3 clear reasons why, or
  - d. Give them some other call to action.
9. Engineers commonly spend too much time on the technical side (project description). Don't do that, your listeners want a balanced presentation that also describes why your project is significant.
10. There is nothing wrong with having one person give the presentation, even if five worked hard on your team. But if multiple people share the presentation, then have clear and logical breaks between them (e.g., one Introduces your Team/Topic/Department and describes the Need, while another Presents Your Project and Next Steps). Practice the hand-off, a good handoff passes credibility on to the next speaker.
11. All team members should be prepared to participate in Q&A. Teams commonly look more cohesive when one member fields the questions and passes them off to the team member most qualified to answer that question.
12. Only one minute for Q&A so answer the question but be brief. Two questions with short, clear answers is probably a stronger finish rather than one question with a rambling answer.

There are no right or wrong approaches to public speaking, and no one approach is best in all situations. Here are some suggestions for you to consider that may contradict some of what is written above:

1. Since time is so short let the few slides, you have (I'm assuming PowerPoint is being used) do some of the talking for you. Pick the pictures and or figures you project wisely. In the same way your words should be bold and attention getting, so should the images on your slides.
2. Written words on the slides can be very powerful in driving the major concepts of your project home with the audience. But a few important rules (especially for a short "elevator speech"):
  - a. No word-only slides and /or bulleted list slides. Every slide should have an image (picture, high level drawing, etc.) on it.
  - b. Put words in a text box. It allows you to easily move it around the slide and position it to enhance the meaning of the images which are the stars of the slide.
  - c. Font size needs to be big enough for people in the back of the audience to read (but its venue dependent)
  - d. Limit words. They don't have to be complete sentences, just short statements or even a few key words.
3. It's important to "write out" your words for practice so you can learn to manage the limited time you have, but during your presentation you don't want to sound robotic.
  - a. I would also suggest you don't read from prepared cards or sheets of paper

you are holding. It leaves the impression of being unprepared and/or not passionate about your project. It can also be disastrous if you lose your place and start stumbling around to get back on track.

b. Again, the key is to practice, practice, practice.

Some general guidance on elevator speeches

- <https://www.mindtools.com/pages/article/elevator-pitch.htm>
- <https://www.forbes.com/sites/nextavenue/2013/02/04/the-perfect-elevator-pitch-to-land-a-job/#fc3bd4c1b1d2>
- <https://www.cnbc.com/2017/12/05/six-tips-for-perfecting-the-elevator-pitch.html>
- If there is one theme every entrepreneur and investor agreed on when it comes to the elevator pitch, it's the need to bring personality and passion into your speech.

## Sample Pitch Evaluation Form

Judge: \_\_\_\_\_

Team Poster # \_\_\_\_\_

Poster Title: \_\_\_\_\_

*SCORE: 5 (Excellent).....4.....3 (Fair).....2.....1 (Inadequate)*

|                                  | Score |
|----------------------------------|-------|
| Visual Impact                    |       |
| Poster Organization              |       |
| Engineering Problem and Need     |       |
| Does the solution meet the need? |       |
| Ability to answer questions      |       |
| Ability to work as a team        |       |

Comments/Suggestions (*use the reverse side as needed*):

## Engineering Expo Poster Competition

**Date: May 3rd 2024**

**Time: 1:00-2:00pm**

**Location: Stamm Room**

**Who: Capstone Senior Engineering Design Teams**

All capstone teams participate in the poster session. We ask that posters be uniform size at 46" x 46" and they can be printed at UNM Copy Center through respective departments. Teams can start mounting posters at 12pm or earlier in the Stamm Room and take down posters by 3:45pm. Teams should not leave unattended personal belongings as well as any demo materials in the Stamm room beyond 2pm or at the start of the pitch session. Teams are also reminded to **collect judge's poster feedback** at the end of the Expo's award ceremony.

Typical poster sections are:

Title, author(s), and affiliation(s)

Introduction

Objectives/Hypotheses/Aims

Materials and methods

Results

Conclusions

Acknowledgements

References (scaled down very small in size)

Contact Information

For more information on poster design from THE SCIENTIST'S GUIDE TO POSTER DESIGN, visit <https://www.kmeverson.org/academic-poster-design.html>

Another resource <https://www.craftofscientificposters.com/>

## Sample Poster Evaluation Form

Judge: \_\_\_\_\_

Team Poster # \_\_\_\_\_

Poster Title: \_\_\_\_\_

*SCORE: 5 (Excellent).....4.....3 (Fair).....2.....1 (Inadequate)*

|                                  | Score |
|----------------------------------|-------|
| Visual Impact                    |       |
| Poster Organization              |       |
| Engineering Problem and Need     |       |
| Does the solution meet the need? |       |
| Ability to answer questions      |       |
| Ability to work as a team        |       |

Comments/Suggestions (*use the reverse side as needed*):