Interdisciplinary Capstone Design
Engineering Design EXPO Posters

Assignment Goal

To summarize the highlights of your capstone design project in a highly visual and technical poster format.

Learning Outcomes

As a result of completing this assignment, you should be able to:
- Concisely articulate the value proposition and objective of your project.
- Convey the major highlights for your project and how they influenced the overall outcome.
- Visually demonstrate the development and validation process for your project to support the final outcomes and conclusions.

Relevant ABET Learning Outcomes

1. An ability to identify, formulate, and solve complex engineering problems by applying principles of engineering, science, and mathematics.
2. An ability to apply engineering design to produce solutions that meet specified needs with consideration of public health, safety, and welfare, as well as global, cultural, social, environmental, and economic factors.
6. An ability to develop and conduct appropriate experimentation, analyze and interpret data, and use engineering judgment to draw conclusions.

Rationale

Most of the target audience at the Annual Engineering Design EXPO will not have an opportunity to attend your technical presentation. However, they may have time to spend a few minutes interacting with your EXPO Poster to gain a higher-level summary of your project and its accomplishments. The Poster also serves as a permanent record of the visual Executive Summary of the project for future study.

Task

Working in your capstone team, you are assigned to create a visually stimulating Poster (30" high x 40" wide) summarizing the highlights of your capstone project.

The suggested approach for **creating** your Poster is:
1) Use one of the MS PowerPoint templates provided on the Mindworks website
2) Structure your Poster presentation to cover the following topics:
   - The single objective of your project.
   - The background and value proposition for your project (including articulation of the real-world problem you are working to help solve).
   - A brief summary of key requirements for your project.
   - Brief overview of the conceptual development process and evaluation of concepts.
   - Visual reference to the key attributes of your final design and why they are important.
   - A summary of the validation results, confirming the prototype meets the requirements.
   - Conclusions and Recommendations for adoption or future development of the design.
3) Add the top Global Goals Icons (typically 2-4 icons) to one corner of your poster.
4) As a "rule-of-thumb", the poster should include LOTS of pictures, graphs, tables, etc., but also include concise annotations so the Poster can be read/understood without any verbal commentary.
5) Other guidelines:
   - Use a **minimum of 33-point font** for all text to enable readability from 4-6 feet away.
   - Include the names of ALL **team members, mentors, and lead instructors.**
   - Include the name of your **project sponsors** (including a company logo if appropriate).
   - Acknowledge any other **contributors or supporters** for your project.

*Note: If you are working with an **external sponsor**, verify that the sponsor if comfortable with the content you are presenting on the poster.*

Below is a typical layout for a technical poster, including *suggested* relative amounts of "space" on the poster to allocate to each sub-section. However, every project is different, so adjust the poster layout as needed to accomplish the goals outlined above.

Many good examples of successful capstone project Posters are also hung throughout the hallways of the Engineering buildings on the U of I campus.