

Engineering Design Review: Expectations & Instructions

You will give four presentations this semester with different goals and purposes.

Presentation	Time Limit	Audience	Purpose
Startup Pitch	2–3 minutes	Instructor & Peers	Show your semester plan
Lightning Talk (Showcase Day Presentation)	5 minutes (auto-advancing)	General Public	Encourage guests to come check out your project in more depth.
Engineering Design Review	25 minutes (mostly discussion)	Technical / Engineers	Describe in detail your accomplishments, rationale, and system design. Get Feedback.
Technical Deep Dive	25 minutes	Technical / Engineers	Describe in detail your accomplishments, rationale, and system design.

Purpose of Engineering Design Review

Engineering Design Reviews (EDRs) are a critical part of the design process. They serve as a structured opportunity to receive feedback, reflect on progress, and improve both the technical quality and feasibility of your solution. A successful EDR focuses on design, not just ideas or background.

By participating in the EDR, you will:

- Demonstrate understanding of the engineering design process
- Communicate technical work clearly and concisely using visual and verbal methods
- Evaluate your own and others' work with a critical and constructive lens
- Reflect on individual and team contributions
- Collaborate to incorporate feedback and refine your approach

The Engineering Design Process

Your team should always be aware of where you are in the design process. You must reference your current stage during your EDR presentation and in your documentation:

Define → Research → Generate → Evaluate → Design → Refine → Implement → Maintain

TEAM PRESENTATION & DESIGN HANDOUT

Time Limit:

- Each team will deliver a 25-minute session, including 15 minutes for discussion and Q&A. This means your presentation should be no more than 10 minutes long. Use your time wisely to focus on design content and decision-making. Don't focus on information that we already know.
- **Do not spend more than 1–2 minutes on background information and instead focus on your design and design decisions.** Assume your audience already knows what your project is about. Avoid repeating your problem statement or stakeholder description in detail. Instead, use your time to focus on your engineering decisions, system design, and open technical questions.

Design Handout

Include a handout for the class with at least one diagram that illustrates your current system design. These visualizations are a critical aspect of being able to communicate your design effectively and to receive feedback. It's important to take

them seriously and spend substantial time and effort creating highly informative diagrams.

Your handout should:

- Include your project name and current design stage
- Include at least one engineering artifact (block diagram, schematic, flowchart, etc.)

Teams should bring printed copies to their engineering design review. If you submit them by noon on the day you are presenting, then the professor will print them for you.

Audience Participation

It's important to be an active participant in the engineering design review, even if your team is not presenting that day. Keep track of what questions you asked the team, as well as their response and include these in your inventor's notebook submission.

Focus your questions on clarity, feasibility, and design trade-offs. Aim to push the presenting team to think critically about their assumptions and decisions.

SUBMISSION INSTRUCTIONS

- Submit your handout and any other materials under the team_deliverables folder in GitHub.
- Make sure to keep your GitHub repository organized. You can create additional folders under the team_deliverables folder as needed to keep the files organized and avoid file clutter.