150+ Hour Experience: *SpaceX* Internship

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Overview

- **Company:** SpaceX
- **Role:** Mechanical Engineering Intern
- **Team:** Facilities
- **Timeframe:** Summer 2024
- **Project Types:** Infrastructure design

Project Scope

Projects:

- Facilities engineering support for Falcon 9 launch and manufacturing operations
- Infrastructure planning for launch cadence growth
- Facility layout and space planning for operational efficiency
- Coordination of design, construction, and on-site implementation

Engineering Tools:

- Revit
- MatLab

Impact

Collaboration: • Worked with facilities, mechanical, structural, and operations engineers • Incorporated feedback from cross-functional design reviews • Coordinated with contractors to align design intent and execution	***Contributions:*** • Created and updated facility layouts based on operational needs • Performed calculations to support design and space planning decisions • Implemented design changes following engineering reviews • Supported timely design updates in a fast-paced environment

Skill Development

Challenges:	***Learnings:***
• Managing evolving requirements and limited initial data • Working under tight timelines and rapid iteration cycles	• Early verification of inputs reduces design rework • Value of clear communication across teams • How infrastructure design directly affects launch operations

Reflection

- Gained an understanding of how large engineering organizations operate at scale
- Saw how infrastructure and facilities work directly enable mission-critical outcomes
- Learned how engineering decisions are influenced by operations, timelines, and risk
- Developed confidence working in environments with high expectations and rapid turnover