Helix Earth Engineering Intern - Job Description

Location: Houston, TX 77004 | Full-Time, Onsite

About Helix Earth

Helix Earth is a rapidly growing startup on a mission to improve conditions in the built environment and beyond. Born from innovations originally designed for NASA's space exploration, our groundbreaking solutions are now being adapted to revolutionize air conditioning and pioneer new carbon capture technologies. If you're eager to contribute to a greener future and be part of a team shaping the forefront of sustainable technology, Helix Earth is the perfect place for you to make a difference. Join us in creating a cooler, cleaner planet for generations to come.

About the Role

Helix Earth is seeking Summer Engineering Interns to join our engineering team in Houston for Summer 2026. This is a highly hands-on, onsite internship where you will be building prototype units alongside our mechanical and product engineering teams. You will work directly on real-world HVAC retrofit technology development, contributing to design, rapid prototyping, testing, and analysis projects that directly impact our product development. Expect to get your hands dirty building hardware at a fast pace. This role is very hands-on.

About You

You are a motivated engineering student with strong fundamentals and hands-on building skills. You have sharp CAD abilities, a detail-oriented approach to documentation, and a hunger to learn fast in a startup environment. You thrive when iterating quickly, building prototypes, trying new approaches, and solving real engineering problems alongside experienced engineers. You are comfortable working with tools, building physical hardware, and moving fast from design to fabrication.

Responsibilities

- Support mechanical design and 3D modeling using **SolidWorks**
- Build prototype units at a fast pace for summer testing
- Conduct **3D printing and rapid prototyping** for design validation and testing
- **Own basic testing and analysis** projects while supporting system-level testing efforts
- Perform **root cause analysis** on component and system failures
- Document test procedures, results, and technical findings with clarity and precision
- Assist with thermal, fluid, and mechanical analysis
- Support lab operations, test setup, and data collection
- Collaborate with cross-functional teams including mechanical, electrical, and controls engineers
- Iterate quickly on designs based on test results and feedback

Qualifications

- Currently pursuing a **Bachelor's, Master's, or PhD in Mechanical Engineering** (rising junior, senior, or graduate students)
- Strong **engineering fundamentals** in:
    - Heat transfer
    - Mechanics (statics and dynamics)
    - Statistics
    - Fluid mechanics
    - Basic electronics
- **Sharp 3D CAD skills**, specifically **SolidWorks**
- Ability to work hands-on building prototype units at a fast pace
- **Detail-oriented personality** with **solid documentation and reporting skills**
- **Willingness to try things quickly and learn fast** to iterate at maximum speed
- Experience with **3D printing and prototyping**
- Ability to conduct **root cause analysis**
- Strong problem-solving skills and engineering curiosity
- Ability to work independently and as part of a team
- Excellent communication skills

Preferred Qualifications

- Previous internship or project experience in mechanical engineering or HVAC
- Familiarity with thermal or fluid testing equipment
- Experience with data acquisition systems
- Knowledge of HVAC systems or thermodynamics applications
- Hands-on experience in lab or maker spaces

Why Helix Earth

- Gain real-world engineering experience in a **fast-growing climate tech startup**
- Work on **meaningful projects** that directly impact product development and commercialization
- Learn from experienced engineers working on **cutting-edge HVAC technology**
- Collaborate with a **driven, mission-aligned team** focused on high impact and fast execution
- Build skills in rapid prototyping, testing, and product development
- Contribute to technology that is **transforming comfort and energy use in buildings**

Benefits

- **Competitive hourly compensation**
- Hands-on experience with real engineering challenges
- Mentorship from experienced engineers
- Potential for full-time opportunities post-graduation
- Flexible work environment in a mission-driven startup