

Mechanical R&D Intern – Fall 2025 / Spring 2026

Overview

Support ongoing mechanical design, prototyping, and testing of lunar ISRU and surface-construction hardware. Collaborate with engineering staff on subsystem iterations and documentation.

Key Responsibilities

- Maintain and update CAD models (SolidWorks) of mechanical assemblies; implement design changes from test feedback.
- Fabricate components using lab shop tools (CNC, 3D printer); assemble and troubleshoot prototypes.
- Execute mechanical validation tests (static loads, fatigue, thermal) and record quantitative performance data.
- Generate mechanical drawings, track configuration changes, and assist in preparing technical reports for SBIR/STTR deliverables.
- Participate in weekly project reviews, present design progress, and recommend improvements to senior engineers.

Required Qualifications

- Enrolled in Mechanical, Aerospace, or Materials Engineering (undergraduate or graduate).
- Proficiency in SolidWorks: part/assembly modeling, drawing creation.
- Familiar with machining processes and mechanical test equipment (load frames, LVDTs).
- Strong communication skills; capable of writing concise technical documentation.

Preferred Qualifications

- Experience with vacuum-compatible mechanical systems or geotechnical rig design.
- Familiarity with GD&T and materials selection for extreme environments.

Duration & Compensation

- Full time (35-40hr/week) from August 25 to December 15, 2025 (Fall) or January 15 to May 1, 2026 (Spring).
- Potential continuation into Summer 2026.