



**Nanoracks**

## **Lead Mechanical Engineer**

**Position:** Lead Mechanical Engineer

**Reports to:** Director of Engineering

**Location:** Webster, Texas (We're right by Johnson Space Center!)

### **About Nanoracks:**

Nanoracks is an entrepreneurial aerospace company focusing on providing commercial access to space, currently on the International Space Station (ISS), suborbital vehicles, India's Polar Satellite Launch Vehicle, and more! The company, which was once tagged as the "UPS of Space", has sent nearly 1,000 payloads to the Space Station. Nanoracks kickstarted the CubeSat deployment revolution and has deployed over 250 to date.

Since 2009, Nanoracks has created and expanded new in-space markets and has been the world leader for ushering in a new era of in-space services. Currently, Nanoracks is working to build commercial space stations ("Outposts") from the spent upper stages of launch vehicles in orbit. This technology will enable spent upper stages to be used as crewed and un-crewed space stations for various purposes and customers—both civil and commercial.

Nanoracks will provide and facilitate an ecosystem of interoperable technologies and distributed free flying space stations. The commercial approach to this effort is described in NanoRacks' LEO Commercialization Study, available online here: <http://nanoracks.com/nanoracks-leocom-study-release/>.

Nanoracks prides itself on being the first commercial space station company with customers – customers that come from 30+ nations around the world.

### **Description:**

Nanoracks is looking for a Lead Mechanical Engineer to design, develop and test aerospace mechanical/structural equipment, components, and systems. This person shall apply engineering principles and methods to generate mechanical/structural designs and select components to complete a system design. This person will also oversee fabrication efforts for these systems and perform testing and troubleshooting of the systems. This person will lead and mentor less experienced engineers.

**Role/Responsibilities:**

- Create specifications, SolidWorks CAD models, and drawings; sometimes with a drafter, for designs fulfilling mission requirements.
- Inspect parts and designs by vendors to verify compliance to specifications and drawings.
- Author unambiguous procedures and work instructions for technicians to assemble parts per your design intent.
- Leading functions assigned in the mechanical/structural design, manufacturing, inspection, testing, assembly and disassembly of flight hardware and related equipment for ground handling and testing of the flight hardware.
- Position will involve leading projects and prioritizing workload to insure timely delivery of flight and non-flight hardware.
- Typical hardware design and integration experience includes (but is not limited to) aerospace structures, aerospace mechanisms, avionics housings, pressure systems, and other related mechanical/structural systems.
- The ability to produce and read mechanical/structural drawings is important. Experience with mechanics tools, ground handling systems, etc. is preferred.
- This position may support all phases of design, including feasibility studies, conceptual design, preliminary design, detailed design, design documentation including authoring of interface control documents, and structural analysis or coordination with structural analysts as required.
- The Engineer will work directly with other design engineers and mechanical engineers to achieve a common design that meets the assigned schedules.
- Work independently with little direct supervision to support tight milestone schedules.
- Present design and analysis results at impromptu and scheduled reviews.
- Support the operations team in authoring flight operations procedures .
- Lead problem resolution during the production, testing, and flight integration mission phase.
- Support the operations team in authoring flight operations procedures, crew training, and resolving problems as they arise during flight operations.

**Basic Qualifications:**

- Bachelor's degree or higher in engineering, science or computer sciences (preferably Mechanical or Aerospace Engineering) from an accredited university.
- 7-15 years professional work experience.
- You must be a US citizen.

- Strong oral and written communication skills for both technical and non-technical audiences.
- Familiarity with CAD development software (SolidWorks preferred).

**Preferred Qualifications:**

- Familiarity with the aerospace industry, including launch vehicles and/or satellite development.
- Previous experience in generating mechanical/structural designs.
- Previous experience in aerospace materials.
- Previous experience in mechanical/structural fabrication techniques (e.g. machining, 3D printing, sheet metal, etc).
- Previous experience in structural and thermal analysis.

You love space, because we do too.

ITAR and US citizen requirement.

**Compensation:**

Competitive with local and industry standard.

The successful candidate will be required to sign a Non-Disclosure Agreement (NDA).

We hope you'll apply to join our team. We do work with leaders from all over the world, including NASA, universities and government centers both foreign and domestic, and commercial companies. We're fast, fun, passionate, and love sending things to space.

**What we're looking for:**

Smart, talented, critical thinkers with an ability to handle responsibility in a dynamic and ever-changing landscape. You will own your projects and be results oriented. NanoRacks is a small company (60 awesome people), but we interface with much larger organizations from around the world. You will need to be able to work in small and large groups as well as simultaneously execute an entire project on time.

To apply, please send a cover letter and resume to [jobs@nanoracks.com](mailto:jobs@nanoracks.com).