Job Description
Mechanics Design Engineer

Key Responsibilities

Development of mechanical systems, such as flight controls and landing gear, for suborbital space planes.
Candidate will be responsible for but not limited to the following tasks:

- Designing, modeling and simulating space plane mechanical systems, parts and components
- Determine and select suitable materials and components for mechanical systems
- Kinematics design
- Structural load analysis
- Plan and conduct systems, parts and components testing
- Perform analysis of the test data
- Assist in systems integration and space plane assembly
- Coordinate with suppliers for outsourced part fabrication
- Manage design iterations based on design changes per development milestones

Required/Essential Skills

- Strong understanding and extensive experience in mechanical system design and analysis.
- Experienced in CAE design (FEA and 3D CAD software proficiency)
- Able to read and draw technical/manufacturing drawings
- Knowledge in various materials, their properties and manufacturing processes (metals, plastics, composites, etc.)
- Strong understanding of kinematics
- Basic knowledge of flight dynamics, mechanisms and avionics of airplanes and rockets
- Able to craft and build test parts and equipment by hand.
- Bachelor's degree from an accredited institution, with concentration in Aeronautical, Astronautical, Aerospace, Automation, Electronics, or Mechanical Engineering

General Skills and Competencies

- English proficiency (equal to or above TOEIC 550, TOEFL iBT 57 points)
- Able to find, analyze and solve problems independently
- Familiar with various fabrication methods (CNC lathe, milling, 3D printing, composite material layup, etc)
- Proactive and have flexibility to move and/or support other teams
- Capable of working under pressure and for extended hours when necessary
- Capable of working in fast paced dynamic environment
- Capable of making of and adapting to quick design changes.

Preferred Skills and Experience

- Master's degree from an accredited institution, with concentration in Aeronautical, Astronautical, Aerospace, Automation, Electronics, Telecommunication or Mechanical Engineering
- Knowledge of aerodynamics, programming, electrical engineering, signal buses and control engineering.
- Experience of landing gear and flight control system design
- Experience of testing and verification of systems
- Knowledge of Japanese is not required but useful

Location
Hekinan city, Aichi prefecture, Japan. Occasional trip and short term stay may be required.

Intake process
Download required application documents on the link below
Fill documents and send to careers@pdas.co.jp
https://pdas.co.jp/documents/PDAS_member_documents-set.zip

Candidate that pass document screening will be contacted to schedule interview.

Please address any question to careers@pdas.co.jp

About PD Aerospace
PD Aerospace is a space start-up company that was founded in 2007. PD Aerospace is developing a fully reusable space plane equipped with original technology engine (technology successfully tested in 2017). PD Aerospace is currently developing unmanned space plane to cultivate core technology and planned to start commercial manned spaceflight.