

Job Description Mechanical Engineer

Key Responsibilities

Develop, design and test engine peripheral components and subsystems such as engine nozzle and cooling system. Candidate will be responsible for but not limited to the following tasks:

- Calculate baseline design requirements for engine peripheral components and subsystem based on engine assumptions

- Develop and draw detailed design for engine peripheral components and subsystems such as but not limited to aerodynamic parts and actuators

- Determine and select suitable materials and parts for engine components
- Assist in space plane assembly
- Coordinate with suppliers for outsourced part fabrication

Required/Essential Skills

- Knowledgeable in basics of flight dynamics and mechanism of airplane and rocket
- Good understanding and experience in designing rocket or jet engine components
- Experienced in CAE design (FEA and 3D CAD software proficiency)
- Strong understanding in thermodynamics and fluid dynamics
- Knowledge in various materials, their properties and manufacturing processes (metals, plastics, composites, etc.)
- Able to read and draw technical/manufacturing drawings

- Bachelor's degree from an accredited institution, with concentration in Mechanical Engineering, Aeronautical or Astronautical

General Skills and Competencies

- English proficiency (equal or above TOEIC 550, TOEFL iBT 57 points)
- Able to find, analyze and solve problems independently
- 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 Mechanical Engineering, Aeronautical or Astronautical

- Familiar with ISO 9001 and general knowledge in quality assurance
- 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 info@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 info@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.