

SVIFA TECHNOLOGIES

Job Description: Lead Drone Design Engineer

Employment Type: Full-Time | Work Mode: On-Site | Location: G 35, Udyog Kunj, UPSIDC Industrial Area, Ghaziabad, Uttar Pradesh 201001 | Department: Engineering - Product Design

ABOUT SVIFA TECHNOLOGIES

Svifa Technologies is a defence-technology company engaged in the design and development of Hybrid VTOL drone platforms, encompassing persistent aerial surveillance systems and autonomous logistics resupply solutions.

POSITION OVERVIEW

Svifa Technologies is seeking a Lead Drone Design Engineer to assume complete ownership of the design of its Hybrid VTOL, quad-rotor drone platforms, encompassing airframe conception through the integration of propulsion, structural, and avionics subsystems. This is a senior, hands-on engineering role, requiring the incumbent to direct design decisions across both the Surveillance and Logistics drone programmes in close coordination with aerodynamics, avionics, and manufacturing functions.

KEY RESPONSIBILITIES

- Assume complete ownership of the design of the Hybrid VTOL, quad-rotor airframe, including layout, structural architecture, and subsystem integration across both surveillance and logistics variants.
- Direct aerodynamic and structural design decisions, supported by Computational Fluid Dynamics (CFD) analysis of airframe and rotor/propeller configurations.
- Define and validate design specifications, including payload capacity, endurance, operational range, cruise speed, and structural load limits.
- Coordinate with propulsion, avionics, and manufacturing teams to ensure design feasibility and manufacturability at scale.
- Conduct design validation through simulation (ANSYS Fluent/Workbench or equivalent tools) and physical prototype testing.
- Prepare formal technical documentation, design reports, and specification sheets for internal review and defence-customer briefings.
- Iterate and refine designs based on flight-test data and field performance feedback.

REQUIRED QUALIFICATIONS

- Bachelor's or Master's degree in Aerospace Engineering, Mechanical Engineering, or a closely related discipline.
- Demonstrated foundation in aerodynamics, structural design, and UAV/VTOL systems engineering.
- Hands-on proficiency with CFD tools (ANSYS Fluent/Workbench or equivalent) for aerodynamic and thermal analysis.
- Proficiency in CAD software, including SolidWorks, CATIA V5, or AutoCAD (2D and 3D).
- Working knowledge of Python or an equivalent language for design automation and data analysis.
- Prior project, research, or internship experience in UAV systems, propulsion, or high-speed/supersonic flow analysis is strongly preferred.
- Demonstrated ability to lead a design effort independently, from concept development through to validated specification.

PREFERRED QUALIFICATIONS

- Prior experience with defence, aerospace, or space-systems organisations.
- Exposure to VTOL-specific design challenges, including hybrid propulsion integration, transition-phase aerodynamics, or morphing-wing concepts.
- A record of published technical reports, capstone projects, or research contributions in aerodynamics or UAV design.
- Familiarity with high-altitude or high-speed (supersonic/hypersonic) flow regimes.

WHAT SVIFA TECHNOLOGIES OFFERS

- The chance to be a founding member of the engineering team, not just an early hire - the design decisions you make now will define the company's first product line, not iterate on someone else's.
- Complete ownership of the drone's design, with no existing structure, legacy process, or prior team to work around - you are building the foundation, not inheriting one.
- Direct, daily access to the founder(s) and company direction - no layers of management between your work and the decisions that shape it.
- A defence-technology mission with genuine real-world stakes, from day one.
- The speed and flexibility of an early-stage company - decisions move fast, and your impact is immediately visible.