



Electrical Design Engineer

At Martin UAV, our mission is to build the world's most advanced autonomous flying robots with a focus on safety, reliability and repeatable performance. Our technology team specializes in building tactical systems from the ground up and addressing the vast capability gaps left by legacy technologies. With decades of rapid design and build advancement, our platforms offer capabilities unmatched in the world.

We are currently seeking a driven and adaptable Electrical Design Engineer focused on hardware design and payload integration for our vertical take-off unmanned aerial vehicle. The successful candidate will lead design of avionics components and integration of new payloads and sensors for our unmanned vehicles and ground station system.

Responsibilities

Electronics Design and Prototyping

- Design, prototype, test, and document analog and digital circuits for flight vehicles and ground station electrical components.
- Perform broad range of engineering tasks including schematic capture, analysis, PCB design, prototyping, fabrication, testing, and final design documentation.
- Circuit design for DC power distribution, AC/DC conversion, avionics sensors, and embedded controllers.
- Provide design documentation and technical communication for PCB and wiring harness fabrication facilities.
- Design and build benchtop test fixtures for design verification and unit calibration.

Sensors and Payload Integration

- Work with 3rd party sensor and payload vendors to document electrical interface requirements including power and digital/analog data.
- Design electronics and wiring harnesses to interface with sensors and payloads.
- Learn and use vendor provided software/hardware to bench test and demo sensors and payloads.
- Create test plans for performance evaluation and acceptance testing of 3rd party sensors and payloads.

Additional Responsibilities

- Troubleshoot and diagnose anomalies discovered during benchtop, qualification, and flight testing.
- Provide insights to support development of avionics systems needed to efficiently diagnose/discover anomalies and component failures.
- Support flight testing of electrical components including custom electronics, sensors and, payloads.
- Identify and evaluate 3rd party sensor/payload vendors. Initiate and actively maintain technical communication with 3rd party vendors.
- Communicate with customers and company leadership to define design requirements.
- Various tasks as needed by supervisor or manager within reason.



The ideal candidate will have been intimately involved with the development and flight testing of aircraft which may include military drones, research vehicles, hobby projects, or general aviation. The candidate must have exceptional organizational and self-management skills, be comfortable with a high pace startup environment, and be capable of adapting to new roles and areas of expertise.

Skills and Experience

- Required
 - Basic soldering, crimping, splicing, and electronic prototyping experience
 - Small hand tools such as drills, saws, Dremmel, and heat guns
 - Proficiency with bench top power supplies, DMMs, signal generators
 - Circuit and wiring harness schematic capture tools
 - MS Office
- Desired
 - ESD, EMI and RFI shielding strategies
 - Heat management for power electronics
 - Conformal coatings/potting compounds for moisture protection and reliability in harsh environments
 - Proficiency with logic analyzers, spectrum analyzers, and oscilloscopes
 - SPICE simulation tools
 - PCB layout tools
 - Code repositories such as Git, Mercurial, or SVN
 - Project management tools
 - RC experience with fixed wing or rotorcraft
 - UAV and RC COTS components and building and prototyping small aircraft

Qualifications

- BS or MS in Electrical Engineering or related field is required
- 3-7 years of relevant aerospace industry experience
- Specific applicability of skills, previous projects, and roles will be considered more heavily than years of experience alone

Martin UAV is located in Prosper, Texas. We offer a comprehensive benefits package including medical, dental, vision and life insurance, PTO days, and a 401(k) plan with company matching.

Contact our Careers Team at Careers@MartinUAV.com to submit a resume and a statement regarding your suitability for this position.