

# Job Description

## Electrical Harness & Package Design Engineer

4-6 Yrs

General Aeronautics specializes in Drone / Unmanned Aerial Vehicle (UAV) development & deployment for agriculture, medical and defence use cases. General Aeronautics was established to address aircraft design in all its aspects from a comprehensive system-level perspective. The General Aeronautics team is comprised of highly experienced members with many decades of expertise in industry and R&D organizations internationally.

General Aeronautics is looking for a Electrical Harness design engineer responsible for the Design of Electrical Harness, routing and manufacturing drawing creation engineer for UAV. You will utilize your expertise and knowledge in building a better systems. You will be working along with design team consist of multidisciplinary engineers on different layers of the organisation and its product. Commitment to collaborative problem solving, sophisticated design, and creating quality products is essential.

## Responsibilities

### Harness Design& Manufacturing:

- Design, Develops and maintains Electrical wire harness details and assembly designs in 3D
- Design transfer to production (Manufacturing drawings, BOM) using in Industrial software like CATIA.
- 3D modelling of harnesses, cable routing, connector, electrical equipment and attachment hardware (Cable ducts, cleats).
- Placement of electrical equipment based on functionality and routing.
- Route 3D wires and cables to obtain exact bundle diameters and wire/cable lengths.
- Design and optimize the avionics and electrical 3D harness in the context of the full UAV.
- Management of engineering & manufacturing BOM for electrical harness and routing.
- Supports electrical designer for design electrical and avionics equipment Assembly.
- Collaborate across the departments to determine the best placement of electrical wiring and electrical components.
- Create detailed reports and keep records design iterations during development cycle.
- Establish and follows the documentation processes, specifications and procedures.
- Perform Design for Assembly check( Ergonomic assessment) for cable routing &
- Installation using 3D.

### Electrical Package:

- Design of electronic package for mechanical and electrical integrity
- Thermal and vibration analysis of electronic package.
- Design of interface for PCB board mounting.
- Design of Bonding and Grounding of electrical and electronics parts

## Skills

- Good hands-on experience in CATIA wiring harness routing, packaging, and flattening and manufacturing drawing creation.
- Hands on experience on Electrical package design.
- Knowledge of wire, connector, terminals, relay, sensors, and electrical equipment.
- Knowledge about cable preparation, loom preparation etc.
- Experience in electronics package design.
- Able to read and understand electrical Architecture, Block diagram, schematics, data-sheets, technical documents for components
- Documentation and writing skills.
- Able to multitask, prioritize, and manage time efficiently
- Able to take initiative to recommend product improvements.
- Able to interpret related standards.

## Education

- BE Electrical / Mechanical engineering or a related subject

Contact : [jobs@generalaeronautics.com](mailto:jobs@generalaeronautics.com)