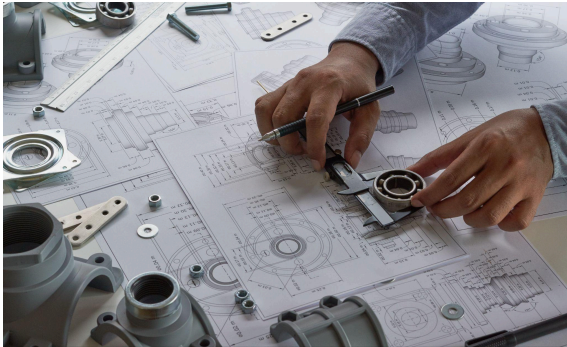


# Brooks and Brian Engineering Services



## Mechanical Engineering

- Design and develop mechanical systems, components, and assemblies
- Perform stress analysis, finite element analysis (FEA), and computational fluid dynamics (CFD)
- Optimize designs for strength, durability, and manufacturability
- Create detailed engineering drawings and specifications for production

## Electrical Engineering

- Design and develop electronic circuits, PCBAs, and embedded systems
- Select appropriate components, sensors, and actuators for product functionality
- Ensure compliance with electrical safety standards and regulations
- Create schematics, PCB layouts, and bill of materials (BOM) for manufacturing

## Packaging Engineering

- Design protective and visually appealing packaging for your products
- Optimize packaging for product safety, storage, and transportation
- Select sustainable and cost-effective packaging materials
- Ensure compliance with packaging regulations and industry standards

## Manufacturing Engineering

- Develop and optimize manufacturing processes for efficiency and scalability
- Design jigs, fixtures, and tooling for production
- Conduct design for manufacturing and assembly (DFM/DFA) analyses
- Collaborate with suppliers and manufacturers to ensure quality and reliability

## Reliability Engineering

- Perform failure mode and effects analysis (FMEA) to identify and mitigate potential risks
- Conduct accelerated life testing and stress testing to validate product durability
- Develop and implement reliability test plans and procedures
- Analyze field data and customer feedback to continuously improve product reliability

## Human Factors Engineering

- Design products that are ergonomic, user-friendly, and accessible
- Conduct user research and usability testing to optimize product design
- Ensure compliance with human factors standards and guidelines
- Create user manuals, instructions, and training materials for safe and effective product use