

Shock EO Systems is a market leading international company that specialises in the research and development of Electro-Optical (EO) assemblies for the Security, Military / Defence and surveillance environment. Our facility is situated in the Route 21 Corporate Park, Pretoria.

Our projects run from the design phase up to proto-typing and getting the products production ready. We are currently seeking engineers to join our excellent team in 2025. We are seeking the following:

Mechanical engineers:

Areas of knowledge: (Preferred, but not mandatory)

- Mechanical design
- Detailed CAD modelling and design (PTC CREO, Simulate & Mechanism Dynamics or similar)
- Opto-mechanical design
- Thermal analysis
- Tolerance analysis
- Stress analysis
- Specifying production test requirements of mechanical systems and subsystems
- Ability to perform simulations in Matlab / Mathcad etc

Mechanical engineer key responsibilities:

- Provide a Mechanical Engineering service in the EO field that includes the following tasks:
 - Interpretation of system / product requirements applicable to mechanical design considerations
 - Interfacing with other engineering disciplines and specialists in the optical, mechanical, electronic, software etc. fields
 - Design of mechanical assemblies and subassemblies
 - Generation of relevant mechanical specifications documentation (e.g. MICD, Product Spec, etc)
 - Systems integration and testing with other engineering disciplines
 - Lab testing and evaluation of produced designs.
 - Systems integration and testing with other engineering disciplines
 - Full Data-Pack and configuration management for the opto-mechanics (Windchill)
 - o Preparation of Data-pack for serial production
- Engineering management support including but not limited to:
 - o Interfacing with the mechanical production facility.
 - o Interfacing with the optics production facility.
 - Procurement of engineering materials and equipment.
 - o Procurement of manufactured items