



Mechanical Design Engineer

DefendTex is an Australian owned Defence company with a strong focus on innovation, research and technology development. DefendTex services military and law enforcement communities around the world. At DefendTex, we value integrity, innovation, professionalism and passion. Our vision is to be a world leader in defence innovation.

DefendTex are seeking an experienced Mechanical Engineer to join an expanding team working on the development of cutting-edge Defence technologies. Specifically, the role will be focused on design and development of an autonomous robotic platform. The successful applicant will be required to work as part of a multidisciplinary team, with a focus on mechanical design of the platform and support systems for integration, perform 3D CAD modelling of components for manufacture, assembly and integration.

The successful applicant will base mechanical designs and development on empirical test data to optimise the system's performance. They will also provide insight into materials and manufacturing improvements where appropriate. These designs will require the integration of electronic systems, as well as the use of a variety of lightweight high-performance materials.

About this role

- Mechanical design and optimisation of the platform and mechanical sub-systems
- 3D CAD modelling of components and assemblies to be used in the robotic platform
- Preparation of manufacturing drawings including tolerancing and dimensioning to Australian Standards
- Undertake appropriate due diligence, conducting preliminary and critical design reviews for product optimisation
- Development of test plans
- Failure analysis
- Liaise with external suppliers of sub-components and raw materials

About you:

Essential:

- Bachelor of Engineering (Mechanical)
- Sound knowledge of mechanical systems design
- 3D CAD modelling expertise (SolidWorks preferred)
- Experience preparing manufacturing drawings to AS 1100
- Good understanding of engineering materials
- Experience with FEA tools and simulation
- Hands-on, practical approach to engineering problem solving
- Knowledge of various manufacturing processes e.g., manual and CNC machining, injection moulding, casting, 3D printing, fabrication
- Sound understanding of Design for Manufacture and Assembly principles
- Australian Citizenship - must be eligible for the Australian Government BASELINE security check
- Not be a prohibited person under Section 3 of the Firearms Act 1996 (Victoria)
- This role is required onsite and thus you will be required under the Victorian Government mandate to provide proof of vaccination in accordance with the mandate.

Desirable:

- Experience in an R&D role
- Thrives in a fast paced, dynamic work environment
- Interest and breadth of knowledge in other engineering domains (e.g., Robotics, electrical)

A dynamic, agile and enthusiastic applicant who operates well in a multidisciplinary team environment will suit this role.

As a Defence security clearance is required for this role, applicants must be Australian citizens and eligible to obtain and maintain a Baseline clearance. To learn more about clearances please visit – <http://www.defence.gov.au/AGSVA>

Why us?

- Competitive remuneration
- Exciting projects and industry leading innovations
- Professional learning and development opportunities

- Working in a dynamic team environment with talented engineers to develop innovative, novel applications for defence
- Opportunity to work collaboratively with external research organisations and institutions

We are committed to ensuring diversity, inclusion and equality are embedded throughout our organisation for the benefit of our customers and our employees. We strive for a positive and engaging workplace where mental health and wellbeing are supported. We welcome applicants from all diverse backgrounds, including Aboriginal and Torres Strait Islander people.

If you are looking for a unique and exciting opportunity, we look forward to your application.

Interested?

If this sounds like you, are you're interested in applying for this exciting role, please send your CV and Cover Letter to our Head of People and Culture, Lauren McCleery at lauren.mccleery@defendtex.com