



## Graduate Mechanical 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 a Graduate Mechanical Engineer to join an expanding team working on the development of cutting-edge Defence technologies. Specifically, the role will involve working on novel armour systems. The successful applicant will be required to perform 3D CAD modelling of armour system sub-components, assemblies and tooling as well as providing detailed manufacturing drawings.

The successful applicant will assist in designing and physically developing prototype armour systems through material processing techniques including composite manufacture and steel heat treatment. The role will involve extensive ballistic testing to inform and optimise the respective systems which the successful applicant will be required to support. The role will also require the development of a manufacturing process for the candidate products along with design and development of test equipment and support systems. The successful applicant will be required to keep detailed processing and test records and carry out statistical analysis of this data.

Initially the role will be working on the development and commercialisation of novel armour systems, however, there will also be opportunities to assist in other technologies under development.

### About this role

- Design and development of mechanical components, systems and tooling for military systems
- 3D CAD modelling of components and assemblies to be used in armour systems
- Preparation of manufacturing drawings including tolerancing and dimensioning to Australian Standards
- Carrying out critical design reviews and design optimisation
- Assist in the procurement of plant and equipment used for processing of advanced armour systems
- Assist in the set-up of a pilot manufacturing plant
- Manufacturing test samples and prototypes
- Assisting in ballistic testing campaigns including field testing
- Applied research in the field of armour and anti-armour technologies

### 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, specifically, metals, polymers and composites including processing experience
- Hands-on, practical approach to engineering problem solving
- 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)
- Strong attention to detail
- Accurate recording and analysis of process and performance data

#### Desirable:

- Experience in an R&D role
- Thrives in a fast paced, dynamic work environment
- Experience in composite processing
- Basic understanding of personnel armour systems
- Experience with FEA tools and simulation
- Knowledge of various manufacturing processes used for light weight armour systems

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](mailto:lauren.mccleery@defendtex.com)