Multiple Scientific Engineering Positions

Position Title:	**Scientific Mechanical, Electronic and Microelectronic Engineers**
Position Reference Number:	ECRRSD007 Electronic Engineering ECRRSD002 Microelectronic Packaging Engineer ECRRSD004 / ECRRSD006 Mechanical Engineering
Division	Research Services Division
Position Classification:	S&T3-4 (APS4/5-6)
Position Location:	Edinburgh SA, or Fisherman's Bend VIC
Security Level:	NV1 / NV2
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Academic Disciplines

■ Aerospace/ Aeronautical Engineering, Naval Architecture	☐ Chemical, Radiological, Biological, Food sciences	☐ Materials Science
☐ Computer Sciences, IT, Software Engineering, Telecommunications	☐ Mathematics and physics	☐ Psychology and Social Sciences
■ Mechanical and Mechatronic Engineering (including robotics)	■ Electronic/ Electrical Engineering	☐ Other

Position Overview

DST's Scientific Engineering Services (SES) deliver specialised scientific engineering, design and fabrication solutions contributing to keeping DST at the forefront of Australian Defence innovation, and providing valuable support to Defence and National Security operations. SES provides integrated, multidisciplined, leading edge, rapid response and innovative scientific engineering solutions to DST, across the breadth of Defence technologies. SES fosters a culture of excellence, world leading capability and strong external partnerships dedicated to supporting the engineering needs of DST. SES will strongly consider part time applicants and strongly encourages both male and female engineers to apply. SES will provide and fund opportunities for further training, education and professional development to enhance skills in the domain of electronic systems design and development.

SES are seeking skilled and enthusiastic engineers looking to develop a career in:

- **ECRRSD007 Electronic Engineering**: Hosted and embedded electronic hardware and software sub-systems, working at the leading edge of engineering. Undertakes project management, design, development, review, manufacture and implementation activities. The role is suitable for an engineer in the early stage of their career, with some experience across a broad range of Electronic Design skills and Electronic CAD (Mentor PADS Pro, Mentor Expedition or Altium Designer;
- **ECRRSD002 Microelectronic Packaging**: miniaturized electronic (including miniaturized RF hardware), electro-optic, and micro-mechanical systems, at the leading edge of engineering. The Microelectronics Packaging Engineer undertakes design, integration, and assembly of complex micro-scale systems and devices. The role requires knowledge of micro-assembly techniques (wire bonding, flip chip bonding, bond testing, dicing and packaging) and also the design and integration of micro-scale devices into larger systems under limited supervision;
- **ECRRSD004 and ECRRSD006 Mechanical Engineering x2**: Mechanical design and engineering analysis across a wide variety of mechanical and multidisciplinary systems at the leading edge of engineering;

All positions collaborate across the spectrum of mechanical, electronic, micro engineering and applied imaging design engineers for product development; and with subcontractors for design and delivery of prototypes and tooling including discrete components. They also collaborate and partner with DST researchers to design and manufacture to unique and innovative requirements. Candidates will work as part of a multi-disciplinary team to achieve project goals and objectives, undertaking work on multiple projects simultaneously and managing time and project cost. You will be required to write clear and concise test and design verification reports based on laboratory measurements, and apply quality management principles and associated business procedures within an ISO9001 accredited quality system.

POSITION DESCRIPTION

Position Duties

Electronic Engineer will:

- Design and develop Embedded Microprocessor Based Digital Hardware Design; Embedded FPGA Based Logic Design; Printed Circuit Board Design; Analog Power Systems Design; Analog Signal Conditioning Design; Embedded Software Design (Contexts including General Purpose Operating System, RTOS, bare metal); and Hosted Software Design (C#/C++)
- Manage projects and prepare Design documentation
- Apply their practical experience with embedded systems and/or microprocessors; with schematic capture and simulation tools; and with PCB design and layout for EMC, immunity, vibration and environmental impacts.

Microelectronic Packaging Engineer will:

- Create, maintain and review processing documents to achieve quality and reliable devices in accordance with quality management principles and associated business procedures within an ISO 9001 accredited quality system.
- Apply standard Project Management principles in managing small to medium size projects using computerized tools and reports. Interact with personnel or project teams from SES, DST on matters of a moderately complex engineering nature.
- Develop strong external relationships as part of the Australian Micro engineering community and leverage academia, external agencies and industry to deliver S&T outcomes

Mechanical Engineers will:

- Review engineering designs to determine their structural suitability, highlight associated engineering risks and manage the budget and schedule for multiple mechanical design projects.
- Undertake conceptual design utilising Computer Aided Design (CAD) software, structural analysis using first principles or finite element (FEA) packages and project management of multidisciplinary engineering teams.
- Lead or contribute to the engineering of systems to be integrated onto military and/or civilian platforms, custom scientific platforms or within laboratory environments supporting scientific research.
- Develop creative high performance engineering solutions utilising our Advanced Manufacturing Technologies including polymer and metal 3D printing.

Other Requirements

Positions may be exposed to chemical or plant hazards, personal protection equipment will be provided. Some interstate travel and participation on scientific research trials may be required. Positions work as part of a dynamic team and there may be some peaks and troughs in the workload.

APPLY HERE*

***PLEASE NOTE:**

Applications are welcomed from candidates with **relevant engineering qualifications** (ie, certificate, diploma, undergraduate, or post-graduate degrees). Please note, to be eligible, candidates **will require 2 or more years demonstrated industry experience,** and some positions require industry accreditations.

Applications are to be submitted through the **DST "Early Career Researcher"** application portal. As an Engineering professional, you will work alongside DST researchers and contribute towards DST's scientific innovations and research outcomes.