



# Enterprise Control Systems Ltd

## JOB DESCRIPTION AND PERSONAL SPECIFICATION

Post Title:	Senior RF Design Engineer
Department:	Engineering Dept ECS Technology Park
Reports to and how fits into the structure:	Principal RF Design Engineer or Engineering Manager
Who reports into the post holder:	N/A
Key working relationships:	N/A
Main Purpose of the job:	<p>Enterprise Control Systems Ltd is recruiting a Senior RF Design Engineer to join their existing engineering team.</p> <p>The role of Senior RF Design Engineer is to take a design concept or idea, produce the specification to match the overall system requirement and then take responsibility for that design through to production and provide on-going support.</p> <p>This is a senior business critical role and as such carries with it additional responsibilities outside the more obvious technical requirement.</p>

### Primary Responsibilities

RF system architecture and circuit design	Provide support and input to the System Design function
Familiarity and experience with industry tools such as Cadence AWR Microwave office and Ansys HFSS	Schematic Design and PCB layout (Altium)
Design of linear high power wide band RF amplifiers up to 200watts using for example, GaN and LDMOS technology	RF simulation using large and small signal models
Design of associated DC supplies including switch mode power supplies (SMPS) and DC sequencing circuitry for power amplifiers.	LNA, Down-converter and Up-converter Design
Design of filters	Transmitter and Receiver Design

Design of antennas	A working knowledge of analogue and digital electronics
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### Personal Specification

Qualifications & Training required:	Degree qualification in an engineering or science discipline
Previous or relevant work experience necessary:	A minimum of 5 years experience in a design role with 10 years relevant experience desirable.  A proven track record of taking designs through prototype stage to production and a practical 'hands on' approach with knowledge of bench tuning and RF measurement techniques essential.
Aptitudes and Sills required:	Excellent verbal and written communication, interpersonal and inter-departmental skills.
Personal Qualities & Attitude	A self-starter, self-motivated and able to produce results under pressure.  Willingness to take instruction and to contribute ideas in a team environment.  Interacting with internal employees, clients and colleagues in a professional and timely manner.  Ability to fit into a close-knit working community.

### Key Competencies required for the job

The attainment of SC clearance with no caveats.
Design experience and a thorough understanding of RF communication systems/products
Practical experience of testing prototype RF circuitry using standard RF laboratory equipment
Proven track record using Cadence AWR Microwave Office and Ansys HFSS
Schematic design and PCB layout experience
Excellent knowledge of the latest RF components and technologies.
Able to develop initial ideas and prototype them quickly
Provide documentation such that testing can be done effectively by others for production use.
Experience of design in the defence or aerospace sector
Good understanding of digital modulation techniques particularly COFDM

**Note:** This job description is not exhaustive and will be subject to periodic review. It may be amended to meet the changing needs of the business. The post-holder will be expected to participate in this process and we would aim to reach agreement on any changes