

Job Description: Lead Systems Engineer – Model Based Systems Engineering



Department: Electrical Electronic Systems

Job role overview: Lead Systems Engineer - Model Based Systems Engineering

Report to: Team Lead - MBSE

Location: Hinckley, UK

Role Purpose:

The Lead Systems Engineer is responsible for the technical delivery of a defined area of Electrical & Electronic system functionality, ensuring that customer, program and business requirements are translated into robust system solutions using Model-Based Systems Engineering (MBSE) methodologies.

The role provides day-to-day technical leadership for a small team of Systems Engineers, coordinating activities, delegating work and ensuring delivery of high-quality engineering outputs aligned to program timing, cost and quality objectives.

Report to: Team Leader Engineer – MBSE

Location: Hinckley, Leicestershire

Key Responsibilities:

Technical Leadership

- Lead the definition, development and delivery of complex E&E system features and functions.
- Ensure stakeholder needs are captured and translated into clear, verifiable and traceable requirements.
- Lead the development of system architectures, functional models, interfaces and behavioural specifications within the MBSE environment.
- Provide technical leadership throughout the system development lifecycle from concept through validation and launch.
- Lead technical investigations, root cause analysis and resolution of complex engineering issues.
- Ensure system solutions consider safety, cybersecurity, diagnostics, functional behaviour, maintainability and future scalability requirements.
- Drive robust technical decision-making through structured analysis and trade-off evaluation.

Delivery Leadership

- Coordinate delivery activities across a small team of Systems Engineers.
- Define priorities and allocate work to ensure effective utilisation of engineering resources.
- Monitor progress against programme milestones and engineering deliverables.
- Identify risks, issues and dependencies, implementing mitigation and recovery plans where required.
- Ensure engineering outputs are delivered to agreed timing, quality and maturity targets.
- Provide regular status updates to the Team Leader and project stakeholders.

Systems Engineering Excellence

- Champion the adoption and application of MBSE tools, methods and standards.
- Maintain high levels of requirements traceability and model quality.
- Drive continuous improvement of systems engineering processes, methodologies and templates.
- Support the development of engineering standards, best practices and lessons learned.
- Promote a systems-thinking culture across projects and engineering functions.

Stakeholder Management

- Act as the primary technical focal point for assigned systems and feature portfolios.
- Collaborate effectively with software, hardware, validation, architecture and programme teams.
- Support engagement with suppliers and external engineering partners.
- Facilitate technical reviews, workshops and design discussions.
- Influence technical direction through effective communication and evidence-based recommendations.

Coaching & Capability Development

- Provide technical mentoring and guidance to Engineers, Graduate Engineers and new team members.

- Conduct technical reviews and support the development of engineering capability.
- Share knowledge, best practice and lessons learned across the wider systems engineering community.
- Support recruitment, onboarding and succession planning activities where required.
- Encourage continuous professional development and technical excellence.

Success Measures

The Lead Systems Engineer will be successful when:

- Consistently delivers complex features on time.
- Creates clarity and direction for engineers around them.
- Resolves technical issues before they become programme risks.
- Develops engineers who progress into Senior and Lead roles.
- Improves MBSE methods and standards beyond their immediate project.
- Is recognised as the technical authority for their system domain.
- Enables the team to deliver more effectively through delegation, coaching and prioritisation.

Person Specification:
Lead Systems Engineer – Model Based Systems Engineering



	Essential	Desirable
Qualifications and Attainments	BEng or MEng in Systems Engineering or equivalent. HND in relevant subject and relevant experience.	Chartered Engineer or working towards Chartered Engineer status or INCOSE ASEP / CSEP
Professional Experience and Skills	Technical Knowledge • Strong understanding of Systems Engineering principles and methodologies. • Practical experience of Model-Based Systems Engineering tools and approaches. • Experience defining system requirements, architectures and behavioural models. • Understanding of system decomposition, interfaces and requirement traceability. • Experience delivering complex electrical, electronic or software-enabled systems. • Knowledge of verification and validation planning and execution. Leadership & Delivery • Ability to define priorities, allocate work and monitor progress across a small team. • Ability to manage risks, dependencies and technical issues effectively. • Demonstrated experience leading complex feature or subsystem development activities. • Strong stakeholder management and communication skills. • Ability to make sound technical decisions based on evidence and analysis.	• Experience within automotive, motorcycle, aerospace or other complex engineering environments. • Knowledge of Functional Safety (ISO 26262). • Knowledge of Cybersecurity Engineering (ISO/SAE 21434). • Experience with SysML and MBSE toolsets such as Preevision or equivalent. • Experience supporting recruitment, talent development and succession planning activities
Personality and Motivation	• Strong systems-thinking capability. • Collaborative and team-oriented approach. • Proactive problem solver with a focus on delivery. • Ability to influence stakeholders at multiple organisational levels. • High level of personal accountability and ownership.	
Appearance and Characteristics	Well presented and professional in approach.	
Circumstances	Flexible on working hours.	Willing to undertake UK and Overseas travel.