



Role Description

Role Description	Systems Engineer
Document owner:	Chief Technical Officer
Version:	221026
Keep informed:	Systems Engineer

1. Overview

The role of Systems Engineer is to deliver innovative solutions for our customers via system integration. The role is responsible for leading all technical aspects of engineering projects including assessing customer requirements, developing customer hardware and software solutions, supporting customers, and writing technical documentation. The role requires a strong system level understanding of the functionality and use of the company's products and how to adapt them for new applications.

2. Duties and Responsibilities

- Use system analysis tools (UML, Data Flow, FMEA, etc.) to analyse customer needs, system requirements, capability, and cost to determine project feasibility. Produce and present work package documents and quotation proposals.
- Lead the identification of technical enablers and deliver the proof of concept prototypes as required by our customers.
- Lead the integration of complex systems containing electronic, mechanical and software sub-systems.
- Lead the development of the system validation plans and ensure our solutions meet the design specifications and requirements.
- Ensure technical solutions are developed based on a clear understanding of both the product and its relationship with the user.
- Chair and coordinate application engineering technical design reviews and make sure we have appropriate reviews (concept, detailed design and final design reviews) and documentation to support our development life cycle.
- Provide expert help for the Support team to help address customer problems with the use of solutions developed by Application Engineering.
- Support the Application Engineering Manager to develop and implement the quality assurance and regulatory compliance procedures for OXTS products.
- Ensure that the correct health and safety measures are adhered to and risk assessments are conducted when testing.
- Manage multiple concurrent projects and work as a team member on projects; plan, track and manage development tasks. Work to deadlines and adapt plans as necessary to meet project objectives.
- Assist the Application Engineering Manager to coach and mentor staff in AE and work collaboratively with people inside and outside the AE team to successfully achieve outcomes and results.

- Develop and use company procedures, processes, and consistent styles. Write, issue and update hardware and software documentation; adhere to coding standards when developing software. Maintain traceability, update documentation, use version control for all design changes.
- Lead in the preparation of customer visits and meetings. Capture and communicate ideas and technical information on solutions, their performance and application, verbally and in written technical documentation, and provide internally (Marketing, Sales) and externally to customers and channel partners. Write technical articles and application notes for customers and for publication. Support promotion of OxTS's application engineering capability at industry exhibitions.
- Manage customer relationship for application engineering projects:
 - Build and maintain a strong working relationship with the customer to understand their needs and communicate that within OxTS
 - Manage programme of work with the customer to agree and plan tasks, track progress, coordinate meetings and agree actions, resolve issues, manage change.
- Support the Application Engineering Manager in building a culture of excellence and lead the technical development of team and people.

3. Revision History

Revision	Changes
221026	AB: Amended Job Title – Systems Engineer
200924	Role description updated and approved by TY and CH - JC
200908	Rebranded and Technical Director changed to Chief Technical Officer, no content changes - JC
200625	Document created