

SPECIALIST AREA: POWER ELECTRONICS, MOTORS AND DRIVERS (PEMD)

(Linked to L3 Engineering technician [ST0457](#))

NB. The following duties are indicative and not exhaustive

SPECIALIST DUTIES:

- applies knowledge of risk impact and analysis systems to both business practices and vehicle safety at business, project and activity levels
- understands and applies manufacturing productivity tool requirements to diagnose faults with design and maintenance for service systems / tools
- analyses manufacturing productivity systems data to understand efficiency levels
- compiles reports on equipment effectiveness, maintenance systems/tools for statistical analysis
- demonstrates how design for service systems/tools can increase productivity
- operates schedule-based servicing systems/ tools
- demonstrates understanding of the concepts of design for assembly, disassembly and recycling systems/ tools
- maintains end-of-life decommissioning systems design for end of life
- maintains sensors for through life monitoring systems / tools
- uses / applies digital twin systems / tools
- uses / applies relevant fundamental research including low Technology Readiness Level (TRL) technologies, market opportunities for emerging technologies, determine manufacturing and digital readiness levels
- uses and maintains IT security systems, hardware / software / firewall / user account management, standardisation and safety
- defines, uses and maintains predictive maintenance (manufacturing) systems or tools
- uses maintenance systems for high voltage maintenance and repair
- maintains, repairs and overhauls systems including warranty

management, risk planning

- uses manufacturing productivity systems, including lean production, 6 Sigma, Black-belt process improvement and optimisation production parts approval process, process failure mode effects analysis (PFMEA)