Job Title: Test and Approvals Engineer-Cybersecurity Focus	**Location:** Mansfield
Department: Test & Approvals	**Contract:** Permanent
Reports To: Test & Approvals Manager	**Direct Reports:** N/A

1.0 Job Summary & Role

The individual will work within the Test and Approvals department located at the DSE office Mansfield. They will perform verification and validation activities at a product and system level on new product developments as an integral part of ensuring high-quality and cyber-secure products are built by the company.

Full training and support will be provided.

2.0 Key Responsibilities & Main Duties

- Develop and execute test scripts and plans for product testing during new product development and release, ensuring all security requirements are met
- Expand functional test cases to include cybersecurity-aware scenarios, such as validation of certificate handling, authentication flows, and rejection of weak protocols/ciphers
- Design and run negative test cases informed by penetration testing methodologies (e.g., expired or invalid certificates, malformed payloads, repeated failed logins) to ensure secure failure modes
- Setup test apparatus, including wiring and rewiring of test looms
- Complete test and issue reports as part of testing in a controlled manner
- Utilise existing and contribute to the development and/or introduction of new manual and automated testing tools
- Make use of the company documentation, version control system and issue management systems to record findings in a controller manner
- Communicate and maintain timing records for time spent on projects
- Obtain product knowledge and assist with new product specification
- Assist with the development of internal procedures and techniques for verification and validation testing
- Other ad hoc duties as and when required

3.0 Internal & External Relationships

Engineering department – the test and approvals engineer will work closely with the software development team whilst testing the products and communicate the detail of the results

Technical Support – assist technical support with more involved customer queries

4.0 Key Performance Indicators

- Attention to detail, patience and self-discipline required for software testing.
- Consistently using positive working and communication practices to contribute to software verification
- Desire to learn and acquire new skills and knowledge for DSE products and applications in order to fulfil completely the role requirements

5.0 Essential/Desirable Factors

Knowledge	
Essential: - A good level of understanding of testing types, testing methodologies and software product development lifecycles - Principles of cryptography for data confidentiality and authentication, including digital certificates, and how to validate these in test scenarios - Understanding of penetration testing methodologies, and how to translate them into negative and automated test cases - Web and/or mobile application test technologies and practices, including test automation - Knowledge of web servers, APIs, and security testing of web-based applications (e.g., authentication, session handling, TLS enforcement) - Configuring and Troubleshooting IP network settings - An appreciation of electrical systems and engine driven applications	Desirable: - Hardware in loop testing - Basic knowledge of HTML/JS/CSS/Databases (even just at a high level) - Familiarity with XML and JSON - Knowledge of Modbus - Familiarity with MQTT topic files and configuration - ISTQB or equivalent QA certification

Skills & Attributes	
Essential: • Ensure the repeatability of software test plan execution to identify and capture issues during the first test cycle • Attention to detail, patience and self-discipline required for software testing • An open attitude for learning and continuous skills development • Able to perform tasks on their own or as part of a team • Teamwork is essential • Ability to multitask and manage multiple testing activities efficiently	Desirable: • PLC programming in ladder logic and/or structured text
Experience	
Essential: • Working in a test environment for web and/or mobile applications • Develop and maintain test cases, test plans, and test scripts	Desirable: • Experience with at least one test case management tool
Qualifications	
Essential: • BTEC or HND in electrical or Computer Science engineering	Desirable:

Created by	Dated Created
T&A Department Manager	15/09/2025