QMUL Systems Engineering Competency Priority Map 2023

QINETIQ

- SE of large scale systems
- Hybrid agile / conventional SE
- Platform vehicular SE
- SE management processes
- ICT focused SE
- CEMA and SE
- Quantum SE
- Verification & validation for autonomous systems
- Speciality engineering
- Soft skills for SE
- Digital engineering of systems

NASA

- Mission assurance SE
- Trust and autonomy
- Stakeholder management
- Prompt SE
- Data & cyber security

COSTAIN

- Infrastructure SE
- Configuration management
- Systems thinking approaches
- CCM process implementation
- SE for construction & infrastructure

- Verification & Validation process
- SE and digital twins
- Requirement management
- SE knowledge management

Department for Transport

- Accessibility by design
- Socio-behavioural elements
- System resilience
- Ontology
- Fidelity of V-models
- Human-system integration

THALES

- Data capitalisation
- Design for X
- Co-engineering

NATS

- Systems architecture definition
- New ways of working in SE practices
- Multi-modal digital twins
- Project management
- Supply chain management
- Ethics
- Systems mapping requirements
- Cyber-security for AI systems
- V-development process for AI/ML
- Data assurance for AI systems
- Trustworthy principles in AI

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