

Engineered Risk Control Systems and Performance (Nuclear)

Purpose

The aim of this module is to provide an understanding of engineered safeguard systems and the need for performance requirements/ standards, performance assurance and technical integrity verification schemes with a particular emphasis on the nuclear industry.

At the end of the course you will be able to

1. Analyse a nuclear plant to logically deduce the relevant engineered safeguard systems
2. Devise performance standards for nuclear safeguards
3. Illustrate how engineered control systems contribute to technical integrity over the lifetime of the nuclear plant.

Outline content

- Engineered safeguard systems – definition, examples
- Defining performance standards
- Functional requirements
- Availability & reliability
- Survivability
- Interdependencies
- Performance assurance
- Verification of performance
- Technical integrity assurance throughout an asset's lifecycle
- Codes and standards
- Material selection
- Design reviews
- Fabrication tests, certification, etc.
- Construction reviews and inspections
- Commissioning tests
- Preventative maintenance systems

Recommended prior study

Education, skills or experience equivalent to undergraduate level

Risktec module: *Principles of Risk Management*

Who should attend

Managers, discipline engineers, operators and HSE professionals required to identify engineered safeguard systems, develop performance standards and verification schemes and implement performance assurance tasks.

Delivery Methods

Face-to-face, Distance Learning, or Blended Learning

Levels of Assessment

- Attendance only
- Assessment by Risktec
- Postgraduate Qualifications: PgCert, PgDip and MSc

Assessment details

Postgraduate programmes: activities and assignment (total about 80 hours)

Module details

Level: Masters
Duration: 2 days (F2F), or
8 weeks (Postgraduate DL)

Price

For prices and further information, or to book a course, please contact **Vicky Billingham** at training@risktec.tuv.com

Contact

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