

Physical Effects Modelling

Purpose

To enable an understanding of the range of hazardous physical effects that can occur, an overview of human and equipment vulnerability to physical effects, and the uses and limitations of physical effect modelling. This includes an introduction to physical effects modelling and the opportunity for some hands-on practice of physical effects calculations.

At the end of the course you will be able to

1. Analyse an industrial plant/installation to determine expected physical effects in the event of an incident
2. Evaluate, by applying physical effects modelling techniques, how these physical effects affect people and plant
3. Justify which of the available modelling techniques/software is appropriate to analyse physical effects in different circumstances, whilst understanding the limitations of these techniques

Outline content

- What are physical effects and why model them?
- Source term release and discharge calculation
- Dispersion analysis
- Fire modelling
- Explosion modelling
- Subsea releases/dispersion
- Human and plant vulnerability to physical effects
- Commercial and public domain software tools

Recommended prior study

Education, skills or experience equivalent to undergraduate level

Risktec module: *Principles of Risk Management*

Who should attend

Managers, engineers, operators, HSE advisors and risk management practitioners.

Delivery Methods

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

Levels of Assessment

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

Assessment details

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

RPQ programmes: assignment (about 15 hours)

Module details

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

Price

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

Contact

Risktec Solutions Ltd
Wilderspool Park
Greenall's Avenue
Warrington
WA4 6HL
United Kingdom

Tel +44 1925 611 200
training@risktec.tuv.com
risktec.tuv.com