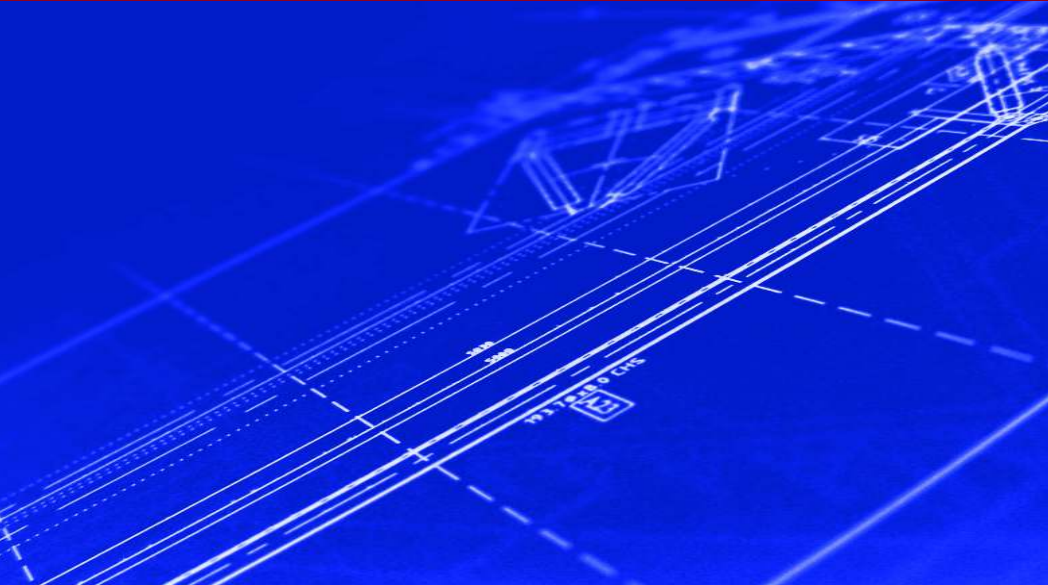


Short Courses for Industry

Hazards in Process Plant Design and Operation



Major investments in the chemical, process and off-shore industries require understanding of all likely hazards. This four-day course concentrates on ways to minimise the risk of mechanical failure affecting any equipment you design, run or maintain.

Designed for people employed in industry, it is of particular interest for those with responsibility for safety. It is also suitable for people involved in risk assessment, managers, safety professionals, shift supervisors, process engineers, and process chemists.

The course

This four-day short course is one of a number run by the Department of Chemical and Process Engineering. You will be trained by experts from industry, specialists in health and safety training and staff from the University of Sheffield.

The course is a mixture of lectures and multi-media presentations as well as interactive workshops and real-life case-studies.

Fees

The cost of this four-day course is £1000 per person.

Venue

The course takes place in Mappin Hall at the University of Sheffield

Date

Course Content

- **Mechanical failure** — principal mechanical failure modes including: deflection, plastic collapse, fracture, fatigue, creep and wear
- **Tutorial calculations in fracture mechanics** — Failure Assessment Diagrams (FAD)
- **Corrosion** — how to design systems to avoid corrosion and examples of best practice
- **Maintenance management to avoid failures** — plant diagnostic condition monitoring including benefits and relative costs
- **Data gathering systems and fault diagnosis**
- **Classification of hazardous areas**
- **Chemical Agents Directive (CAD)**
- **Explosive atmospheres directive (ATEX 137)**
- **Dangerous Substances and Explosive Atmospheres (DSEAR)**
- **Control of Substances Hazardous to Health (COSHH)**
- **Inherent safety** — an approach to process design and operation which builds safety, health and environmental considerations in at the start



The University of Sheffield

Department of Chemical and Process Engineering
Engineering from Molecules



Hazards in Process Plant Design and Operation

- Please register me for the above short course on

_____ (date)

The fee includes refreshments, course lecture notes and hand-outs.

- Please send details of future course dates

Name: _____

Job Title: _____

Company/Organisation: _____

Address: _____

Country: _____

Tel: _____

Fax: _____

E-mail: _____

Please indicate if you have any special needs or dietary requirements:

Please tick as appropriate:

- I enclose a cheque for £1000 (payable to "University of Sheffield")
- Please invoice me for £1000 prior to the course
(please supply purchase order number: _____)
- Please send me details of other four-day courses run by
Department of Chemical and Process Engineering
- Please send me details of the MSc(Eng) "Process Safety and Loss Prevention"

Send this form to:

Mrs Tracey Scott, Course Secretary PSLP
Department of Chemical and Process Engineering
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