

Computer Control — Safe Practice



Computers control every part of modern chemical processing plants. It is vitally important that operators understand the hazards that can be associated with hardware and software errors. This four-day course gives you all the tools you need to minimise these problems. 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

Dates

Course Content

- **Computers** — what they are and how they can go wrong
- **Hazards in computer control** — introduces the concept of using Hazard and Operability Studies (HAZOP)
- **Modelling systems** — this covers various tools which are available and of benefit to the design of computer systems
- **Principles of safe computer control** — gives an introduction to the requirements of safe control systems
- **IEC 61508 / 61511**— gives a complete overview of the IEC 61508 and 6511 standards
- **Establishing integrity levels** — IEC 61508 and similar standards require the setting of integrity levels for safety
- **Sneak Analysis (SA)** — a technique for identifying design errors
- **Life-cycle specifications** — describes the design life-cycle of typical software-based systems and explains what is to be specified, by whom, and when
- **Towards safer industrial computer controlled systems** — a study of previous incidents and an introduction to a systems tool variation of HAZOP called HAZAPS
- **The PES checklists** — the HSE PES Guidelines contain a very useful and extensive set of checklists





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- 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:

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