Nuclear New Build: Electrical, Instrumentation and Control to Achieve Safety in the UK

As the UK Nuclear Industry experiences new growth, safety engineering techniques and technology must adapt to meet the demands of modern UK safety regulations. This new course provides an overview of the safety regime applicable to the UK nuclear industry, from its inception to present day. The course focuses on IEC 61508 and its nuclear derivatives, IEC 61513 and IEC 61226, explaining how the safety requirements of the different regulations and standards relate with each other and how compliance can be met whilst ensuring an acceptable level of risk. The training centres around UK legislation.

Your programme

08.30 Registration and refreshments
09.00 Safety and risk concepts
   • Basic concepts of hazards, causes, accidents and risk
   • Consideration in the nuclear industry
Introduction to generic and nuclear I&C system safety standards (IEC 61508, IEC 61513 and IEC 61226)
   • The development of industry standards and relationship to IEC 61513
   • Relationship between and, structure of, standards for safety of nuclear instrumentation and control systems (IEC 61513 and IEC 61226)
   • Important differences in terminology between the standards
   • Relationship between the standards and UK nuclear and other relevant legislation.
Acceptability of risk
   • Different European methods of accepting risk
   • UK risk acceptance principles – tolerability and ALARP

Refreshments

Concepts for NPP design and build
   • Requirements analysis for I&C systems
   • Managing the release of radioactive material
   • Safety analysis activities and techniques
   • Plant hazard identification and fault analysis
   • Design base assessment - designing a NPP
   • Nuclear I&C Safety Integrity Requirement Classification (IEC 61226)
   • Examples of determining classification of systems and categorisation of functions
   • Engineering schedule and assignment of functions to system components
   • Engineering substantiation and providing evidence of compliance.

16.30 Close.

Lunch

Development lifecycle requirements (IEC 61513 and IEC 61508)
   • Requirements analysis for I&C systems
   • Planning the development activities
   • System development and validation planning
   • Integration and commissioning
   • Operation and maintenance
   • Managing security threats.

Refreshments

System design and implementation (IEC 61508)
   • Nuclear industry system design requirements
   • Designing systems in accordance with IEC 61508 Parts 2 and 3
   • What is a SIL and how does this impact the design requirements?
   • Designing a novel product
   • Selecting techniques and methods for developing software
   • Consideration of products adapted from existing applications
   • Dealing with common cause failures.

System validation, qualification and safety assessment
   • Production excellence and supporting documentation requirements
   • Building confidence in claims
   • UK new build guidance
   • Facilitating the work of independent validators and independent assessors.

16.30 Close.
Delegate Form

Please photocopy this form if you wish to register more than one delegate. Send a second person at a discounted price!

Delegate details

Name
Dr Mr Mrs Miss

Job title

Organisation

Address

Postcode

Telephone

Fax

Email

VAT Number* (EU customers only)

Bookings

I wish to make a firm booking for:

Nuclear New Build: Electrical, Instrumentation and Control to Achieve Safety in the UK

☐ 17 June 2015 (Leatherhead)  ☐ 25 November 2015 (Leatherhead)

Fees*

<table>
<thead>
<tr>
<th>Fee rate</th>
<th>Fee</th>
<th>VAT @ 20%</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Early booking</td>
<td>£450.00</td>
<td>£90.00</td>
<td>£540.00</td>
</tr>
<tr>
<td>Standard rate</td>
<td>£500.00</td>
<td>£100.00</td>
<td>£600.00</td>
</tr>
</tbody>
</table>

*AccessERA subscribers and additional delegates receive a 10% discount on these rates. If you subscribe to AccessERA and wish to use your AccessERA credits to attend, please contact the Events Team on: +44 (0)1372 367319. For more information on booking rates, please go to http://shop.era.co.uk;

VAT only applicable to companies based in the UK.

Payment method

Purchase order no................................. is enclosed OR please charge to:
Access/ American Express/ Delta/Diners Club/Eurocard/ Mastercard/ Switch/ Visa

Name of cardholder...............................................................
Cardholder’s telephone..................................................

Card number

Expiry date 

Issue No

Payment has been made by bank transfer

By signing and returning this form to Edif ERA, you agree to be bound by the following (in order of precedence): (1) the terms of this booking form; (2) Edif ERA’s Special Terms and Conditions*; and (3) Edif ERA’s Terms and Conditions of Sale**.

Name.................................................. Signature..........................

*available at http://shop.era.co.uk/main.asp?sitepage=TermPage
** available at www.era.co.uk/terms-and-conditions-of-sale

Venue:

Your course will take place at the Edif ERA Training Centre, Cleeve Road, Leatherhead, Surrey, KT22 7SA. UK. It is a 15-minute walk from Leatherhead main-line station. Visitor car parking is available on-site. A location map is available at http://www.edifgroup.com/contact/edif-era-uk-surrey-head-office.

Early booking rates:

Early booking rates are valid up to one calendar month before the date of the course and can only be claimed at the time of booking.

Additional booking rates:

Additional booking rates are applicable to second and subsequent delegates and may only be claimed at the time of booking.

Did you know?

An AccessERA subscription is an excellent way of accessing technical advice and information in the right format at the right time. All AccessERA subscribers receive a 10% discount on the current course price at the time of booking when the booking is made directly with the Events Team. To find out more, please call us on: +44 (0)1372 367319 or email: events@edifera.com.

Ways to book:

http://shop.era.co.uk

Total security is assured and normal booking conditions apply.

+44 (0)1372 367319 - Please be prepared to quote a purchase order number or supply us with credit card details.

+44 (0)1372 367321 - The Events Team, Edif ERA, Cleeve Road, Leatherhead, Surrey

KT22 7SA.

* Please note that booking forms received without payment will be considered binding and invoiced automatically.

Enquiries:

Please contact the Events Team by calling: +44 (0)1372 367319 or email: events@edifera.com.

How to pay:

Payment must be made before attendance at the event and must be made in £ sterling only. Acceptable methods of payment are by cheque (payable to ERA Technology Ltd), credit card or bank transfer. Bank transfers, free of all charges, can be made to ERA Technology Ltd via HSBC, 9 The Boulevard, Crawley, RH10 1UT; sort code: 40-18-22, account no. 2217895. When paying by bank transfer, please quote the relevant course, course date and the delegate and company name.

Cancellations and transfers:

Cancellations and transfers must be sent via email to events@edifera.com or received in writing to the following address: FAO: Events Team, Edif ERA, Cleeve Road, Leatherhead, KT22 7SA. Cancellations and transfers received up to the 15th working day prior to the event will be subject to a charge of 20% of the invoiced course fee + VAT or 20% of the AccessERA credits charged. After this 15-day deadline, transfers cannot be accepted and cancellations will be subject to payment in full or 100% of the AccessERA credits charged. Delegate substitutions can be made at any time.

Edif ERA:

Edif ERA works at the leading edge of advanced technology consultancy and design. The business provides specialist, high value-added, technology-based services including design and development, testing, assessment and expert advice. For further information visit: www.edifgroup.com.

Did you know?

Edif ERA reserves the right to change, postpone or cancel at short notice any part of its published programme due to unforeseen circumstances. In the unlikely event of cancellation, a full refund will be made of the registration fee. Edif ERA disclaims any further liability.

+44 (0)1372 367319  +44 (0)1372 367321  events@edifera.com  http://shop.era.co.uk