

1 April 2014 (Leatherhead), 4 September 2014 (Leatherhead)

As the reliance on electrical, electronic and programmable electronic systems for the execution of complex safety functions continues to increase, the need to comply with industry best practice and demonstrate due diligence becomes paramount. The IEC 61508 standard “Functional safety of electrical/electronic/programmable electronic safety-related systems” provides a framework for best practice.

Delegates attending this course will gain a thorough understanding of the standard and its requirements as well as design implications and key concepts relating to the achievement of functional safety.

Your Programme

08.45 Registration and refreshments

09.00 **Safety and risk concepts**

- Concept of functional safety
- Basis of UK health and safety law
- Tolerability of risk.

Introduction to IEC 61508

- History of IEC 61508 and related standards
- Structure of the standard
- SIL and other key concepts
- Role of risk assessment.

Refreshments

IEC 61508 Part 1: general requirements

- The overall safety life cycle
- Planning and managing the safety life cycle
- Techniques for hazard analysis
- Safety integrity levels and system architecture.

Introducing Parts 2 and 3: systematic integrity

- Outline of Parts 2 and 3
- Concepts: systematic and random failure
- Life cycle requirements.

12.45 Lunch

Hardware and architectural safety: IEC 61508 Part 2 and guidance on the standard

- Architectural constraints
- Common cause failures
- Failure probabilities
- Basic architecture tables.

Software requirements: IEC 61508 Part 3 and guidance on the standard

- Overview of Part 3
- Importance of the software life cycle
- Relationship to other parts of IEC 61508
- Safety analysis of software and other key issues for Part 3.

Refreshments

Managing safety critical system development

- Assessment and evidence
- Competence
- Interactions with customers and suppliers
- Cost and common mistakes.

Discussion and Questions

- How does IEC 61508 affect your work?

17.30 Close.

Related Courses

Hazard and Risk Analysis for Safety-Related Systems
26-27 March and 1-2 October 2014

Software Safety: Software Development for Safety-Related Systems
2-3 April and 2-3 September 2014

To place a booking, please contact the Events Team on 01372 367319 or via e-mail to events@era.co.uk

Ever thought about in-company training?

ERA can deliver this course at your site, either in standard public format, or as a bespoke option tailored to your organisation's individual specifications. To discuss your training requirements, please call the Events Team on +44 (0)1372 367319.



Your Speakers



Stephen Hatton - Consultant Safety Engineer, ERA Technology

Stephen has extensive experience of safety assessment of electronic and programmable electronic systems, focusing particularly on programmable logic controller based systems.



Dr. William Marsh - Lecturer, School of Electronic Engineering and Computer Science, Queen Mary, University of London

William has been working in the field of software and systems safety and dependability since 1989. His experience has included the development of tools and techniques for static analysis of safe subsets of programming languages. He has audited a number safety-related software development projects and carried out research in new techniques.



Pete Kerry-Wallington - Senior Safety Engineer, ERA Technology

Pete joined ERA in 2010. He proffers experience from the medical, utility, aerospace and railway sectors, primarily using 61508 methodologies, to achieve acceptably safe high complexity systems.

Booking 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
E-mail
VAT Number (EU customers only)

Bookings

I wish to make a firm booking for:

An introduction to IEC 61508

1 April 2014

4 September 2014

Fees*

Fee rate	Fee	VAT@20% [†]	Total	Please Tick
Early booking rate	£432.00	£86.40	£518.40	
Standard rate	£480.00	£96.00	£576.00	

*AccessERA subscribers and additional delegates receive a 10% discount on these rates. If you subscribe to AccessERA and would like 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.

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Venue:

Your course will take place at ERA Technology Ltd 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 and directions are available at: <http://www.era.co.uk/find-us/>.

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?

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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, ERA Technology Ltd, 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 e-mail: events@era.co.uk.

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. 22178095. When paying by bank transfer, please quote the relevant course, course date and the delegate and company name.

Cancellations and transfers:

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ERA Technology Ltd:

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