

For Further Information

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The Engineering Integrity Society

The Engineering Integrity Society (EIS) was formed in 1985, to provide a forum for the interchange of ideas and information on structural integrity, sound and vibration perception and test and simulation for practising engineers, and engineering researchers. The Society continues to be a valuable platform for engineers, organising a number of symposia and training workshops throughout the year, together with the annual Instrumentation, Testing and Analysis Exhibition, and the now well-established International Fatigue Conference held every three years.

The Society is a non-profit making, charitable, organisation run on a voluntary basis, with engineers from a wide range of companies and industries each playing an important part in the organisation of the Society and its various events.

The annual subscription rates are £25 for UK residents and £30 for non-UK residents. Upon joining the Society you will also have the additional advantages of; preferential attendance rates at EIS events, together with selected events held by some of the associated organisations. Access to archive CDs containing copies of EIS presentations.

The ENGINEERING INTEGRITY SOCIETY is pleased to acknowledge the support of the following organisations:

AWE Aldermaston
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EMCON Technologies
GOM UK
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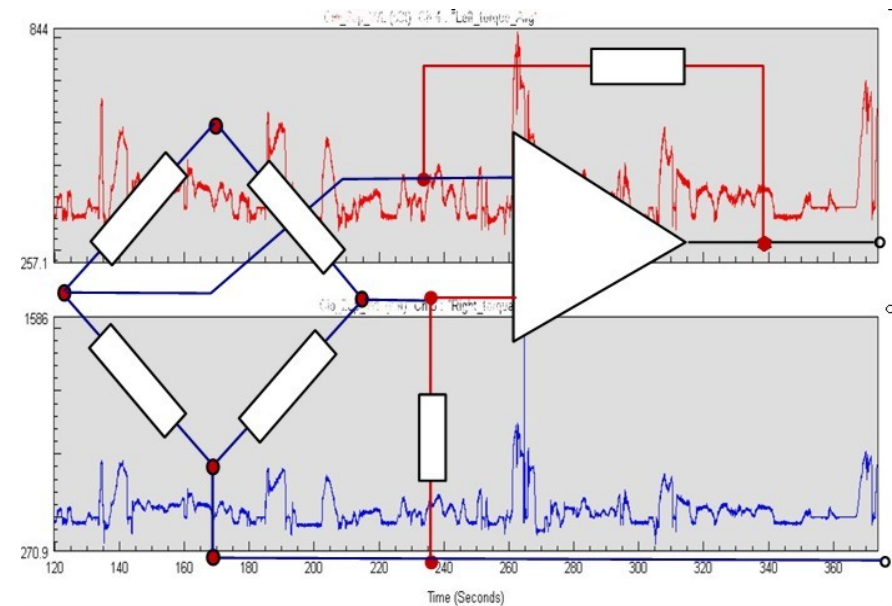


Engineering Integrity Society

Data Acquisition: Principles & Practice

Tuesday 8 June 2010

National Instruments, Newbury
9am— 5pm



A full list of forthcoming events can be found at
www.e-i-s.org.uk

Data Acquisition: Principles & Practice
Tuesday 8 June 2010, National Instruments, Newbury

Hosted by National Instruments, an EIS training course aimed at engineers and technicians interested in data collection for design validation or test simulation. The course is nonmathematical and seeks to provide a sound technical grounding in the principles of data gathering.

Trainer: Mr Geoff Rowlands, Product Life Associates

Course Content:

08:30 - 9:00 **Registration & Coffee**

9.00 **Introduction:**
Designing the data acquisition "system"
Why do we collect data: Who needs it?
Defining the test.

Transducers:
Strain Gauge: What and how does it work?
Wheatstone bridge.
Accelerometer
Temperature measurement
CAN-Bus
Wheel Force Transducers

11.30 - 11.45 **Coffee**

11.45 **Amplification and Recording:**
Basic Amplifier Types
Calibration
Sample Rates, Nyquist & Aliasing
Filters

12.30 - 13:30 **Lunch & Discussion**

13.30 **Setting Up Data Collection:**
How much data to collect
Pre and Post Test Checks
Managing the Documentation.

Data Checking and Validation:
What to look for
Removing Spikes, Drift & Offset
Noise in signals
Statistical analysis

15.00 - 15.15 **Coffee**

15.15 **Data Storage & Archiving**
Managing data storage
Database requirements

17.00 **Close**

Registration Form (**BLOCK CAPITALS PLEASE**)

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TARIFF

	EIS	Non Member (includes 1 years subscription to EIS)
Delegate	£200+VAT	£250+VAT
Students	£50+VAT	£50+VAT

Your Contact Information

Name:
Company:
Address:

Phone:
Fax:
Email:

I enclose a cheque for £payable to "The Engineering Integrity Society". We also accept the following methods of payment: bank transfer, credit card and PayPal.

Please invoice me using purchase order number

I do not wish to receive future EIS mailings

I require a vegetarian meal

I require a certificate of attendance (attendance could count towards your continued professional development (CPD))