



Professional Education and Training

Short Course Programme

**Human Error Analysis for Maintenance**

**Introduction**

There is a growing focus on the need to eliminate or reduce human error in maintenance and its consequences. Human error can cause maintenance error that can degrade the performance of a system and give rise to extremely serious safety and economic consequences.

Much of the initial focus in addressing human error has been placed upon the role of operators through personnel training, through the adoption of procedures and practices and through regulation. More recently, there has been an increasing awareness of the impact that system design can have on human error in maintenance. This course presents a systematic qualitative process for assessing design to identify and analyse potential maintenance error. It also demonstrates how specific design strategies can be developed to reduce the occurrence of maintenance error and to mitigate its consequences.

**Designed For**

This course has been designed for practicing engineers, analysts and managers and others who need to gain basic knowledge and understanding of analytical tools and techniques that can be applied in Human Error Analysis for Maintenance.

**Objectives**

By the end of this course you will be able to:

- Appreciate the significance of human error in maintenance and the requirement for analysis
- Understand the analytic process and its relation to other analyses
- Identify and qualitatively analyse maintenance error – its causes, consequences and detection
- Develop design strategies to eliminate or mitigation maintenance error and its consequences

**Content**

- Introduction and Overview
  - Definition and Concept
  - Significance – safety, effectiveness and economic impacts
  - Maintenance Task Performance and Maintainer-System Interface
  - Design Impact
- Maintenance Error
  - System and Component – characteristics and failures
  - Maintenance Tasks – characteristics and types
    - Maintenance Error
      - Types
      - Causes
      - Consequences

- Design Analysis and Assessment
- Maintenance Error Management Strategies
- Maintenance Error Analytical Process
  - Process Structure and Rationale
  - Process Inputs
  - Relation to Other Analytical Processes (e.g. Maintenance Task Analysis)
  - Process Elements
  - Tools
  - Process Outputs – Design Solutions
  - Design Implementation
- Practical Exercise and Application

**Length**

3 days

<b>Key Information</b>	
<b>Dates</b>	Please see <a href="http://www.mirceakademy.com">www.mirceakademy.com</a>
<b>Time</b>	0900 – 1730
<b>Venue</b>	Woodbury Park Hotel, Golf and Country Club –approximately eight miles by road from Exeter (the nearest major city).
<b>Cost</b>	£950.00 + VAT, tuition fee, course material on CD, light refreshments and lunches.
<b>Accommodation</b>	<p>Accommodation is not included in the course fee. Participants are responsible for the arrangement and payment of their accommodation. Reduced rates are available at Woodbury Park Hotel – contact Woodbury Park Hotel Reservations direct requesting the 'MIRCE' rate. Contact details are –</p> <p>Woodbury Park Hotel, Golf and Country Club, Woodbury, Exeter, EX5 1JJ, United Kingdom</p> <p>Tel +44 (0) 1395 233 382  Fax +44 (0) 1395 233 384  Email <a href="mailto:enquiries@woodburypark.co.uk">enquiries@woodburypark.co.uk</a>  Web <a href="http://www.woodburypark.co.uk">www.woodburypark.co.uk</a></p> <p>A list of alternative accommodation in other hotels and guesthouses in the area of the course venue is available from MIRCE Akademy on request.</p>
<b>Booking</b>	Please complete a Booking Form for each participant and return it to MIRCE Akademy – available to download at <a href="http://www.mirceakademy.com">www.mirceakademy.com</a> under heading Communication and Training.

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