

# **Human Factors Engineering**

**HH161** 

#### Course Overview:

This course will provide an overview of the tools and techniques required for designing systems that are safer, more secure and easier to use through a series of lectures and workshops.

### **Course Objective:**

- -Explain and apply human factors engineering concepts in both evaluation of existing systems and design of new systems.
- -Specify designs that avoid occupation related injuries.
- -Define and apply the principles of work design, motion economy, and work environment design.
- -Identify the basic human sensory, cognitive, and physical capabilities and limitations with respect to human-machine system performance.
- -Acknowledge the impact of workplace design and environment on productivity.
- -Understand professional and ethical responsibility

#### Course Outline:

- -Human errors in the work environment and how to reduce it
- -Human Error Accident Reduction
- -Human Factors in Automation
- -Corporate Culture
- -Engineering a Safety Culture
- -Threat and Error Management
- -Fatigue and Alertness Management
- -Communications
- -Workload Management, Capacity and human efficiency
- -The forces acting on the human body
- -Monitoring and Cross-checking
- -Situational Awareness
- -Potential occupational diseases at work and methods of prevention
- -Work environment in terms of safety and lighting, noise and methods of evaluation.

#### Who Should Attend:

- -Individuals who have responsibilities for assessing and controlling an organisation's potential workplace and work task risks
- -Production, process, maintenance, health, safety and environment personnel

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# Training Language:

EN / AR

## **Training Methodology:**

- -Presentation & Slides
- -Audio Visual Aids
- -Interactive Discussion
- -Participatory Exercise
- -Action Learning
- -Class Activities
- -Case Studies
- -Workshops
- -Simulation



