

# H S E

HEALTH

SAFETY

ENVIRONMENT



Contact us

**Website:** <https://btsconsultant.com/>

**Email:** [info@btsconsultant.com](mailto:info@btsconsultant.com)

**UAE office Tel:** +971 26446633

**Egypt Office Tel:** +2 0502308081

## Advanced Process Risk Management

---

**Duration:** 5 Days



### Introduction:

Most large organizations now have Health, Safety and Environmental Management Systems. Instead of prescriptive legislation and standards, a pro-active approach to risk management based on structured and systematic risk assessment is now in place.

This program is aimed at providing hands-on experience on the application of advanced risk management principles and techniques relevant to the oil, gas and process industries. This program will enable attendees to implement HSE Management System, based on industry best practice. The program will also provide familiarity with promoting positive safety culture, accidents analysis and modern risk management techniques for planning and implementing action plans.

### Pre-Requisite

No previous experience in risk assessment/management is necessary. Adequate guidance is given during this program through individual and group work.

## **Methodology**

This interactive Training will be highly interactive, with opportunities to advance your opinions and ideas and will include;

- Lectures
- Workshop & Work Presentation
- Case Studies and Practical Exercise
- Videos and General Discussions

## **Certificate**

BTS attendance certificate will be issued to all attendees completing minimum of 80% of the total course duration.

## **Who Should Attend?**

---

All Personnel involved in implementing the Company's HSE Management System. The program is based on multi-disciplinary approach for integrating risk management within overall business management

## **Course Objectives:**

---

- Demonstrate the role of risk management as the main element of HSE Management System
- Have a clear understanding of risk management techniques and hands-on experience in applying this technique to their own sphere of activities

- Analyze some principal stages in the accident chain and hazard models. This concept will be used to systematically analyses the root causes for selected incidents that have occurred
- Have the experience in demonstrating that major hazards are adequately controlled
- Ensure consistent optimization of resource allocation for production, maintenance and safety, based on risk and cost-benefit.
- Emphasis throughout the program will be placed on the practical application of advanced risk management techniques to new projects and current activities.

## **Course Outline:**

---

### **Modern HSE Management Systems**

- Program introduction: delegate and tutor introductions; program objectives
- Introduction to HSE Management Systems
- Elements, sub-elements and expectations of HSE-MS
- The role of risk management within HSE-MS
- The role of HSE Audits
- Procedures for planning and implementing of action plans

### **Modern Incidents Investigation Techniques**

- Human contribution to accidents
- The role of root cause Analysis in identifying management system failures
- Accident investigation techniques I: Fault Tree Analysis 'FTA'
- Working in small groups on the use of FTA
- Preparation of action plans

- Incident investigation techniques II: Events & Causal Factors Analysis 'E&CFA'
- Group exercise on investigating a multiple-fatalities accident involving offshore drilling rig

### **Major Hazards Control**

- Control of Major Accident Hazards Codes of Practice
- The HSE- Safety Case Concept
- Elements of emergency planning
- Integrating HSE within major projects plans
- Elements of Projects HSE Plans
- Project HSE Reviews 'PHSER'

### **Machinery safety**

- Introduction into the causation of machinery accidents
- Machinery hazards identification
- Machinery and equipment safety Codes of Practice
- Machinery safety and the CE-marking
- International machinery safety standards
- Machinery risk assessment
- Design and selection of safeguards and safety devices

### **Promoting a positive safety culture**

- Introduction to Safety Culture
- Techniques for improving safety culture
- Measuring improvements in safety culture
- Integrating safety culture within the HSE Management System