

**NEBOSH PSM Exam Prep: Mastering Process Safety in Hazardous Industries** 





## NEBOSH PSM Exam Prep: Mastering Process Safety in Hazardous Industries

#### **Course Overview:**

The course is designed to equip professionals with the essential skills and knowledge required to pass the NEBOSH Process Safety Management PSM exam and manage safety risks effectively in high-hazard environments. Drawing directly from the official NEBOSH HSE Certificate syllabus and structured to address real-world challenges across oil and gas, chemical, and manufacturing industries, this course integrates intensive exam preparation strategies, risk control methods, and applied safety systems.

Participants will delve into key topics such as process safety management systems, contractor safety management, emergency response planning, static electricity hazard control, and the FARSI model for safety-critical equipment. With modules rooted in UK and international safety regulations, learners will gain a robust understanding of process hazard identification HAZID, Bowtie analysis, permit-to-work systems, thermal runaway prevention, and ALARP principles.

### **Target Audience:**

- HSE Managers and Supervisors
- Process Safety Engineers
- Health and Safety Consultants
- Maintenance Managers
- Site Operation Managers
- Safety Trainers and Advisors
- Industrial Risk Specialists

### **Targeted Organizational Departments:**

- Health, Safety & Environment HSE
- Production and Operations
- Risk Management & Compliance
- Engineering & Maintenance
- Chemical Safety Units
- Process Safety Leadership Teams



### **Targeted Industries:**

- · Oil and Gas
- · Chemical Manufacturing
- Petrochemicals
- Pharmaceutical Production
- Industrial Processing Plants
- Food and Beverage Manufacturing
- Utilities and Power Generation

### **Course Offerings:**

By the end of this course, participants will be able to:

- Interpret and apply the NEBOSH PSM syllabus to real industry scenarios
- Identify and control process safety hazards
- Implement process safety management systems effectively
- Apply ALARP principles to reduce risk to acceptable levels
- Analyse shift handovers, permit-to-work systems, and contractor safety plans
- Develop performance indicators leading and lagging for process safety
- Design emergency response plans aligned with COMAH standards

### **Training Methodology:**

This course utilises a dynamic mix of practical, interactive, and theoretical learning strategies designed for adult professionals. Participants will engage in hands-on case studies drawn from real process industry incidents to simulate hazard identification HAZID, Bowtie analysis, and FMEA exercises. Daily group work, role-play simulations, and instructor-led discussions on fire protection systems, emergency planning, and static electricity hazards help reinforce theoretical content with real-world relevance.

### **Course Toolbox:**

- NEBOSH PSM Study Guide digital
- Process Safety Management Templates
- HAZID and HAZOP Worksheets
- FARSI Performance Standards Checklist
- Recommended Reading List from NEBOSH and HSE
- Online Case Studies and Reference Links

### **Course Agenda:**



### **Day 1: Process Safety Foundations & Leadership**

- Topic 1: Introduction to NEBOSH Process Safety Management and syllabus overview
- **Topic 2:** Understanding the difference between process safety and personal safety
- Topic 3: Leadership responsibilities and the development of safety culture
- Topic 4: Organisational learning from incidents, benchmarking, and knowledge management
- Topic 5: Managing organisational change and its implications on safety
- **Topic 6:** Worker consultation and contractor engagement principles
- Reflection & Review: Discussion on leadership-driven safety improvements and lessons learned

### **Day 2: Managing Process Safety Risk**

- Topic 1: Establishing and implementing a Process Safety Management System PSMS
- Topic 2: Risk assessment techniques and the ALARP principle in practice
- Topic 3: Hazard identification and risk analysis tools: HAZID, HAZOP, Bowtie, FMEA
- **Topic 4:** Asset integrity management and preventive maintenance strategies
- Topic 5: Safe systems of work and permit-to-work procedures
- **Topic 6:** Best practices in shift handovers and maintaining operational continuity
- Reflection & Review: Real-world case review of process risk mitigation techniques

### **Day 3: Hazard Control and Operational Safety**

- **Topic 1:** Writing and maintaining effective operating procedures
- **Topic 2:** Safe plant start-up, shutdown, and alarm system protocols
- Topic 3: Safety critical equipment performance and the FARSI model
- Topic 4: Utilities management: steam, water, and inert gases in process industries
- Topic 5: Electricity and static electricity hazard control
- **Topic 6:** Evaluating and managing contractor safety responsibilities
- Reflection & Review: Group workshop on operating hazards and safety interventions

### Day 4: Chemical Hazards, Bulk Storage, and Control Measures

- **Topic 1:** Physical and chemical properties of dangerous substances
- Topic 2: Thermal runaway reactions: causes, consequences, and containment strategies
- **Topic 3:** Safe practices for bulk storage tanks and bunding systems
- **Topic 4:** Siting and fire protection for storage facilities
- Topic 5: COMAH regulations and compliance practices
- Topic 6: Warehouse safety: segregation, ignition control, and weather protection
- Reflection & Review: Application of chemical hazard control through simulated scenarios



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FAQ: Finance and Accounting Training **Courses** 

**Agile PM and Project** Management Training Courses

Certified Courses By International Bodies Communication and **Public Relations Training Courses** 

### What specific qualifications or prerequisites are needed for participants before enrolling in the course?





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What is the FARSI model and how is it applied in safety-critical systems?







Leadership and **Management Training** 

Legal Training, **Procurement and**  **Maintenance Training** and Engineering

**Training Courses** This course stands apart by deliveringer high-intensity nurses the corrected learning about sets not only prepares candidates for the NEBOSH Process Safety Management exam but also strengthens their ability to manage real-world safety risks across hazardous industries. Unlike typical PSM courses, this program offers deeper insights into process hazard identification, fire and explosion risk mitigation, and safety case development aligned with COMAH requirements. The use of scenariobased workshops HAZOP, Bowtie, FMEA and hands-on exercises allows learners to practice complex decision-making under realistic constraints.



## **Training Course Categories**



Marketing, Customer Relations, and Sales Courses



Occupational Health, Safety and Security Training Courses



Oil & Gas Training and Other Technical Courses



Personal & Self-Development Training Courses



Quality and Operations Management Training Courses



Secretarial and Administration Training Courses



## **Training Cities**



Accra - Ghana



Amman - Jordan



Amsterdam - Netherlands



Baku - Azerbaijan



Bali - Indonesia



**Bangkok - Thailand** 



Barcelona - Spain



Cairo - Egypt



Cape town - South Africa



Casablanca -Morocco



Doha - Qatar



Dubai - UAE



Geneva -Switzerland



Istanbul - Turkey



Jakarta - Indonesia



Johannesburg -South Africa



## **Training Cities**



Kuala Lumpur -Malaysia



Langkawi -Malaysia



London - UK



Madrid - Spain



Manama - Bahrain



Milan - Italy



Nairobi - Kenya



Paris - France



**Phuket - Thailand** 



Prague - Czech Republic



Rome - Italy



Sharm El-Sheikh -Egypt



Tbilisi - Georgia



Tokyo - Japan



Vienna - Austria



Zanzibar - Tanzania



## **Training Cities**



Zoom - Online Training

# WHO WE ARE

Agile Leaders is a renowned training center with a team of experienced experts in vocational training and development. With 20 years of industry experience, we are committed to helping executives and managers replace traditional practices with more effective and agile approaches.

## **OUR VISION**

We aspire to be the top choice training provider for organizations seeking to embrace agile business practices. As we progress towards our vision, our focus becomes increasingly customer-centric and agile.

## **OUR MISSION**

We are dedicated to developing valueadding, customer-centric agile training courses that deliver a clear return on investment. Guided by our core agile values, we ensure our training is actionable and impactful.

## WHAT DO WE OFFER

At Agile Leaders, we offer agile, bite-sized training courses that provide a real-life return on investment. Our courses focus on enhancing knowledge, improving skills, and changing attitudes. We achieve this through engaging and interactive training techniques, including Q&As, live discussions, games, and puzzles.





### **CONTACT US**





