

## 1 Day Certificate Course on **HAZARD AND OPERABILITY (HAZOP) STUDY**

### PROCESS SAFETY MANAGEMENT (PSM)

#### ABOUT THE PROGRAM

The purpose of a HAZOP is to identify all possible deviations from which a design is intended to work and all the hazards associated with those deviations and recommend actions to correct deviations from design intent.

It provides a formal review of the Piping and Instrumentation Diagrams (P & IDs) to:

- Check the design and consider whether any of the deviations which may occur, either from a malfunction or mal-operation, cause a hazard to people working on the installation, to the general public or damage to plant and equipment or to the environment in general
- Check whether the safeguards incorporated in the design are sufficient to reduce consequences to an acceptable level
- Consider any safety interfaces that exist with other installations
- Ensure the process plants, general facilities, storage and handling, utilities and other services can be started up, operated, maintained and shut down safely



#### KEY TAKEAWAYS

- Identify causes that lead to potential safety or environmental hazards, or operability problems
- Recommend changes, or further study, to overcome safety or environmental hazards, or operability problems
- Provide training to inexperienced personnel in the design intentions, expected operation, and potential hazards of the facility
- Provide background and bases for the preparation of plant manuals and operating procedures, mechanical integrity programs, and understanding of facility hazards

#### LEARNING METHODOLOGIES

- Lectures/ Presentations
- Handouts
- Q/A Sessions
- Real Life Examples from Projects
- Problem Solving

#### WHO SHOULD ATTEND

- Professional Engineers
- Junior Engineers
- Mid Level
- Non-Engineers (Other Professionals)
- Junior Level
- Mid-Level
- Senior Level
- Corporate Sector
- Any Graduates

## MEET YOUR EXPERT FACILITATOR

Name: Dr.Mirza Munir Ahmed

Designation: HSE Consultant

Department: Health, Safety & Environment

He is an excellent professional in an area of Health Safety & Environment (HSE). He has completed PhD with major in HSE from Universiti Teknologi PETRONAS (UTP), Malaysia in the year 2013. He has more than 50 International Journals. He published one book and his second book is under final review for publication. He completed variety of projects in an area of HSE. Presently, he is providing Engineering, Consultancy, Designing, Reviewing and Training services to companies. He is working Nationally and Internationally on different assignments pertaining to HSE. Apart from this, he is permanent HSE Consultant and Supervising Masters and PhD students from various Universities around the globe. He is NEBOSH accredited certified tutor and provides tutorship for NEBOSH courses. He is highly competent to organize trainings in all areas of Health Safety of Environment and Process Safety Management (PSM). He has been successfully completed many Incident Investigation Reports and Hazard Operability (HAZOP) Studies

## LEARNING OBJECTIVES

- To identify causes that lead to potential safety or environmental hazards, or operability problems
- To Recommend changes, or further study, to overcome safety or environmental hazards, or operability problems



- To provide training to inexperienced personnel in the design intentions, expected operation, and potential hazards of the facility
- To provide background and bases for the preparation of plant manuals and operating procedures, mechanical integrity programs, and understanding of facility hazards

## PROGRAM CONTENT

- Check the design and consider whether any of the deviations which may occur, either from a malfunction or mal-operation, cause a hazard to people working on the installation, to the general public or damage to plant and equipment or to the environment in general
- Check whether the safeguards incorporated in the design are sufficient to reduce consequences to an acceptable level
- Consider any safety interfaces that exist with other installations
- Ensure the process plants, general facilities, storage and handling, utilities and other services can be started up, operated, maintained and shut down safely
- Identify causes that could lead to potential safety or environmental hazards, or operability problems
- Recommend changes, or further study, to overcome safety or environmental hazards, or operability problems

February  
23  
2018

Time: 9:15am-4:15pm

## INVESTMENT

**PKR 9,500** per Participant

Investment Includes: Course ware,  
Certificate, Group Photo, Lunch, Tea

## SPECIAL FEATURES

- lectures, Demonstration, Hand-on Design, Model Testing, Experience Sharing and Discussions-All under one roof.
- Discussions and Q/A sessions for maximum participation.

**Course is valid For ONE CPD Credit  
Point as Per PEC BY-LAWS**

**For Registration and Details, Please Contact:**

Prof. Rizwan U. Farooqui, DG Academy | Dr. Bilal Zahid, Director CCEE

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