



# Training Course: HYSYS Simulation & P&ID Generation

20 - 24 April 2025 Cairo (Egypt) Holiday Inn & Suites Cairo Maadi, an IHG Hotel



# Training Course: HYSYS Simulation & P&ID Generation

Training Course code: EN235617 From: 20 - 24 April 2025 Venue: Cairo (Egypt) - Holiday Inn & Suites Cairo Maadi, an IHG Hotel Training Course Fees: 3900 \[ \] Euro

#### Introduction

This training program, designed by Global Horizon Training Center, aims to provide participants with a comprehensive understanding of HYSYS simulation and P&ID Piping and Instrumentation Diagram generation for commonly used oil and gas packages, such as Sulfur Recovery Units SRU and Gas Dehydration Units GDU. The course is structured to help professionals in the oil and gas industry enhance their technical skills in process simulation and the development of P&ID, crucial for efficient plant operation and design.

### **Objectives**

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

- Understand the fundamentals of HYSYS simulation for oil and gas processes.
- Create and interpret P&ID diagrams for SRU, GDU, and other related packages.
- Optimize process designs using simulation techniques.
- Apply best practices in the generation of P&ID for industrial applications.
- Enhance operational efficiency through accurate simulations and diagram generation.

# Course Methodology

The course will be delivered through a combination of:

- Interactive lectures and presentations.
- Hands-on simulation exercises using HYSYS software.
- Case studies and real-world examples.
- · Group discussions and Q&A sessions.
- Practical assignments on P&ID generation.

## Organizational Impact

Participants who complete this training will bring the following benefits to their organizations:

Improved process efficiency and productivity through advanced simulation techniques.



- Enhanced design and safety standards with accurate P&ID generation.
- Better decision-making capabilities for process engineers.
- Reduced operational costs due to optimized process designs.
- Higher confidence in handling complex oil and gas operations.

### **Target Audience**

#### This course is ideal for:

- Process Engineers
- Chemical Engineers
- Project Engineers
- Technical Managers
- · Professionals involved in the design and operation of oil and gas facilities

#### Course Outline

#### Day 1: Introduction to HYSYS Simulation

- Overview of HYSYS software and its applications in the oil and gas industry.
- · Basic simulation concepts and terminology.
- Setting up a simulation environment.
- Simulation of oil and gas processes.
- Case study: Basic simulation of a Gas Dehydration Unit GDU.

#### Day 2: Simulation Techniques for Oil and Gas Packages

- Detailed analysis of Sulfur Recovery Unit SRU processes.
- Advanced HYSYS simulation techniques.
- Incorporating physical properties and reaction kinetics into simulations.
- Optimization of process parameters.
- Hands-on practice: Simulating an SRU using HYSYS.



#### Day 3: Introduction to P&ID Generation

- Fundamentals of P&ID Piping and Instrumentation Diagrams.
- Symbols and notations used in P&ID.
- Developing P&ID for oil and gas units.
- Integration of P&ID with process simulation.
- Exercise: Creating a P&ID for a Gas Dehydration Unit GDU.

#### Day 4: Advanced P&ID Techniques

- Best practices in P&ID generation for industrial applications.
- Customization of P&ID based on specific process requirements.
- Troubleshooting and updating P&ID diagrams.
- Case study: Review and analysis of an SRU P&ID.

#### Day 5: Practical Applications and Case Studies

- Real-world applications of HYSYS simulation in the oil and gas industry.
- Collaborative group project: Developing a complete process simulation and P&ID for a selected oil and gas package.
- · Final review and feedback session.
- Course summary and key takeaways.
- Certification of completion.



# Registration form on the Training Course: HYSYS Simulation & P&ID Generation

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Complete & Mail or fax to Global Horizon Training Center (GHTC) at the address given below

Delegate Information
Full Name (Mr / Ms / Dr / Eng):  Position: Telephone / Mobile: Personal E-Mail: Official E-Mail:
Company Information
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Please find enclosed a cheque made payable to Global Horizon  Please invoice me  Please invoice my company
Easy Ways To Register

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