



*Training Course:  
Mastering Aspen HYSYS - EHY101: Advanced  
Training for Process Simulation and Optimization*

*13 - 17 December 2026  
Cairo (Egypt)*

## Training Course: Mastering Aspen HYSYS - EHY101: Advanced Training for Process Simulation and Optimization

Training Course code: EN235101 From: 13 - 17 December 2026 Venue: Cairo (Egypt) - Training Course Fees: 4410 €

### Introduction

Aspen HYSYS is a leading process simulation platform used to design, analyze, and optimize complex processes in the oil & gas and chemical industries. Mastering its advanced capabilities enables engineers to enhance efficiency, reduce operational costs, and improve decision-making.

This program, designed by Global Horizon Training Center, equips participants with advanced skills in process simulation and optimization using Aspen HYSYS, focusing on practical applications, model accuracy, and performance enhancement.

### Course Objectives

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

- Build and manage advanced process simulation models in Aspen HYSYS
- Apply appropriate thermodynamic models and property packages
- Simulate and optimize complex unit operations
- Perform sensitivity and scenario analysis for process improvement
- Validate models and ensure simulation accuracy
- Conduct energy integration and process optimization
- Troubleshoot simulation issues and improve model convergence
- Support process design and operational decision-making

### Target Audience

This program is designed for:

- Chemical and Process Engineers
- Oil & Gas and Petrochemical Professionals
- Process Design and Simulation Engineers
- Operations and Production Engineers
- Technical Specialists involved in process optimization
- Professionals seeking advanced expertise in Aspen HYSYS

### Outline

#### Day 1: Advanced HYSYS Fundamentals and Model Setup

- Overview of Aspen HYSYS environment and workflow
- Fluid package selection and thermodynamic configuration
- Stream definition and unit operation setup
- Model initialization and convergence basics
- Best practices for simulation setup

#### Day 2: Thermodynamics and Process Modeling

- Advanced thermodynamic models and selection criteria
- Phase behavior and equilibrium calculations
- Handling non-ideal and complex systems
- Property estimation and validation
- Integration of fluid properties into simulations

#### Day 3: Advanced Unit Operations and Process Design

- Distillation column modeling and optimization
- Reactor modeling and reaction kinetics
- Heat exchanger design and energy integration
- Compression and pumping systems
- Troubleshooting unit operation performance

#### Day 4: Process Optimization and Performance Analysis

- Sensitivity analysis and case studies
- Process optimization techniques
- Energy efficiency and heat integration
- Identifying bottlenecks and performance issues
- Scenario analysis for operational improvement

#### Day 5: Dynamic Simulation, Troubleshooting, and Applications

- Introduction to dynamic simulation and process control
- Troubleshooting convergence and modeling issues
- Model validation and verification techniques
- Reporting and visualization of results
- Case studies and real-world applications

## Registration form on the Training Course: Mastering Aspen HYSYS - EHY101: Advanced Training for Process Simulation and Optimization

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

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Full Name (Mr / Ms / Dr / Eng): .....  
 Position: .....  
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 Personal E-Mail: .....  
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### Company Information

Company Name: .....  
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### Person Responsible for Training and Development

Full Name (Mr / Ms / Dr / Eng): .....  
 Position: .....  
 Telephone / Mobile: .....  
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### Payment Method

- Please find enclosed a cheque made payable to Global Horizon
- Please invoice me
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### Easy Ways To Register

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