



*Training Course:  
Combined-Cycle Power Plant Efficiency*

*29 July - 2 August 2024  
Madrid (Spain)  
Pestana CR7 Gran Vía*

## Training Course: Combined-Cycle Power Plant Efficiency

Training Course code: SC235205 From: 29 July - 2 August 2024 Venue: Madrid (Spain) - Pestana CR7 Gran Vía Training Course Fees: 5775 € Euro

### Introduction:

The Combined-Cycle Power Plant Efficiency training program is designed to provide participants with comprehensive knowledge and practical skills in optimizing the efficiency of combined-cycle power plants. This program is intended for professionals working in the power generation industry and those seeking to enhance their understanding of combined-cycle power plant operations.

### Target Audience:

This training program is suitable for:

- Power plant engineers and operators
- Energy and utilities professionals
- Maintenance and reliability engineers
- Project managers in the energy sector
- Graduates and students pursuing careers in power generation

### Objectives:

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

- Understand the principles of combined-cycle power generation.
- Identify key components and systems in combined-cycle power plants.
- Analyze and optimize the efficiency of combined-cycle power plants.
- Implement best practices for maintenance and reliability.
- Improve safety and environmental compliance in power plant operations.

### Outlines:

Day 1: Introduction to Combined-Cycle Power Plants 5 hours

- Overview of power generation technologies

- Introduction to combined-cycle power plants
- Basic thermodynamics and efficiency concepts
- Components of a combined-cycle power plant
- Gas turbine technology and operation

#### Day 2: Steam Turbine and Heat Recovery Steam Generators HRSG 5 hours

- Steam turbine technology and operation
- HRSG design and function
- Combined-cycle process and integration
- Efficiency calculations and analysis

#### Day 3: Operation and Control of Combined-Cycle Plants 5 hours

- Control systems in combined-cycle plants
- Start-up and shutdown procedures
- Load-following and grid integration
- Troubleshooting common operational issues

#### Day 4: Maintenance and Reliability 5 hours

- Preventive and predictive maintenance strategies
- Condition monitoring and diagnostics
- Risk assessment and safety protocols
- Environmental compliance and emissions control

#### Day 5: Optimization and Future Trends 5 hours

- Efficiency enhancement techniques
- Combined-cycle plant performance analysis
- Emerging technologies in power generation
- Case studies and best practices

- Course review and Q&A

## Registration form on the Training Course: Combined-Cycle Power Plant Efficiency

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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

Company Name: .....  
Address: .....  
City / Country: .....

### Person Responsible for Training and Development

Full Name (Mr / Ms / Dr / Eng): .....  
Position: .....  
Telephone / Mobile: .....  
Personal E-Mail: .....  
Official E-Mail: .....

### Payment Method

- ☐ Please find enclosed a cheque made payable to Global Horizon
- ☐ Please invoice me
- ☐ Please invoice my company

### Easy Ways To Register

Telephone:  
+201095004484 to  
provisionally reserve your  
place.

Fax your completed  
registration  
form to: +20233379764

E-mail to us :  
info@gh4t.com  
or training@gh4t.com

Complete & return the  
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to: Global Horizon  
3 Oudai street, Aldouki,  
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