

HYDROGEN & ITS DERIVATIVES

COURSE OBJECTIVES

To equip participants with comprehensive knowledge and practical understanding of hydrogen and its derivatives in the maritime industry, including hydrogen properties, hazards, storage systems, bunkering operations, fuel applications, emergency response, and regulatory compliance to ensure safe and sustainable marine operations.

ABOUT THE COURSE

This course provides an in-depth overview of hydrogen and its derivatives as alternative marine fuels. It focuses on hydrogen properties, associated hazards, fuel applications, storage and bunkering systems, emergency preparedness, and international regulations. Participants will gain practical knowledge to safely handle hydrogen-based fuels and support maritime decarbonization initiatives.

PARTICIPANTS

Marine Engineers, Deck Officers, Ship Operators & Managers, Bunkering Personnel, Safety Officers and Maritime Compliance Staff

DURATION

One day (Six Hours)

KEY TOPICS

- Introduction to Hydrogen and Its Derivatives
- Hydrogen Storage, Handling, and Bunkering Operations
- Safety Hazards and Risk Management
- Emergency Response and Incident Handling
- Regulatory Requirements and Sustainable Maritime Applications

TRAINERS



Dr Debesh Patra

Dr. Debesh Patra, Superintendent (Technical), is an expert in Economics and Hydrogen with over three decades of experience in the Oil & Gas industry. He recently superannuated from Bharat Petroleum Corporation as Executive Director and has also served as Program Director for Hydrogen at a reputed energy institute. With his extensive industry knowledge and leadership experience, he plays a key role in advancing research on the transportation of hydrogen by ships and its application as a marine fuel under Charismight Labs.