

HYDROGEN AS MARINE FUEL

COURSE OBJECTIVES

To provide participants with foundational knowledge of hydrogen as an alternative marine fuel, including hydrogen properties, production methods, storage systems, fuel cell technology, bunkering operations, safety requirements, emergency response procedures, and regulatory considerations for maritime applications.

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

Deck Officers, Engine Officers, Ship Crew and Ratings, Port and Terminal Personnel, Safety Officers, Marine Engineers and Technical Staff, Maritime Training Personnel, Alternative Fuel and Sustainability Professionals

DURATION

One day (Six Hours)

KEY TOPICS

- Introduction to Hydrogen as a Marine Fuel
- Hydrogen Production, Storage, and Fuel Cell Technologies
- Hydrogen Bunkering Operations and Infrastructure
- Safety Hazards, Risk Management, and Emergency Response
- IMO Regulations, Maritime Applications, and Future Trends

TRAINERS



Dr Devesh Patra

Dr. Devesh 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.