PROPULSION SYSTEM INTEGRATION (PSI)

COURSE OBJECTIVES

- Understand the correlation between resistance, speed and powering of ships
- Interpret results of model tests to arrive at powering estimates a er allowing for various margins
- Understand the design consideration involved in selection of marine propulsion systems in the light of mission statement of the vessel as specified
- Interpret the data provided by manufacturers of individual machinery/ components of a propulsion system (prime mover, gearbox, shafting, propeller, Power Take-off, shaft generator, etc.) and match their individual performance characteristics to propose a stable propulsion system configuration, which will meet the specified operational requirements
- Understand power management scenarios in different operating conditions and propulsion controls
- Carryout detailed system integration by applying the learning through a case study

ABOUT THE COURSE

Choosing the propulsion systems could become a challenge for non-conventional and specialist vessels – such as naval ships, drill ships, vessels engaged in o shore services, etc., which are typically engaged in multi-tasking in a wide range of operating conditions.

PARTICIPANTS

Engineers and Naval Architects engaged in design of ships, engineers and managers working in shipyard design and drawing office, consultants and ship owners' technical managers.

DURATION

Four days

KEY TOPICS

- Correlation between speed and powering
- Interpretation of mission statement and impact of operating conditions on propulsion system
- Interpretation of manufacturers' data in proposing a propulsion system
- Power management in different operating conditions
- PSI for a given vessel/hull through a case study