



Hydrodynamics in Merchant Ship Design | India

4 Day training course, Mumbai, 21 - 24 January 2025

Following our successful annual 5 day courses at MARIN Wageningen, we organize a 4 day course 'Hydrodynamics in Ship Design' in Mumbai. The course gives an overview of the latest developments in hull form and propulsor design, provides guidelines to implement CFD in ship design and addresses seakeeping and manoeuvring aspects. See the full concept programme on the next page.

The course is intended for professionals with a university degree in naval architecture, ocean engineering or equivalent education and working experience in the maritime industry. During the course there will be plenty of time for interaction with the MARIN team consisting of senior project managers working together with the industry every day.



"Great and interesting course, thanks!",

"Fantastic - great refresher!",

"I would definitely recommend this course to my colleagues".

We provide a local version to ease access to MARIN's experts and expertise for the India market.

Participation fee

The course is subject to a minimum number of participants (25) and a maximum (35). For subscription of a group from the same company, discounts apply.

| No. participants | Discount | Price |
|------------------|----------|-------------|
| 1-2 | 0% | € 1,500, pp |
| 3-4 | 5% | € 1,425, pp |
| 5-7 | 10% | € 1,350, pp |
| 8 or more | 15% | € 1,275, pp |

Documentation

The course notes contain the full set of information as presented during the course. The course notes will be made available on the E-learning platform. Strict copyrights apply to the course notes and they shall not be made available or sold to other parties.

Application

A registration form can be found at the MARIN website, www.marin.nl. For more information, send an e-mail to courses@marin.nl or contact Patrick Hooijmans at p.m.hooijmans@marin.nl, +31 6 2507 4321

Concept course programme "Hydrodynamics in Merchant Ship Design"

| Time | Day 1 | Day 2 | Day 3 | Day 4 |
|--------------------|-------------------------------|-----------------------------|------------------------------|-----------------------|
| 8:30 AM | Startup and welcome | Resistance and propulsion | Hull, propeller | Wave added resistance |
| 8:45 AM | | | and appendage interaction II | |
| 9:00 AM | General ship hydrodynamics I | | | |
| 9:15 AM | | | | |
| 9:30 AM | | | | |
| 9:45 AM | | | | |
| 10:00 AM | | | | |
| 10:15 AM | | | | |
| 10:30 AM | Break 10:30 - 11:00 | Break 10:30 - 11:00 | Break 10:30 - 11:00 | Break 10:30 - 11:00 |
| 10:45 AM | | | | |
| 11:00 AM | General ship hydrodynamics II | Hull, propeller | Manoeuvring | Hull form assessment |
| 11:15 AM | | and appendage interaction I | | |
| 11:30 AM | | | | |
| 11:45 AM | | | | Recap and discussion |
| 12:00 PM | | | | |
| 12:15 PM | | | | |
| 12:30 PM | | | | |
| 12:45 PM | | | | |
| 1:00 PM | End of day 1 | End of day 2 | End of day 3 | Closure and Lunch |
| 1:15 PM | | | | |
| 1:30 PM | | | | Certificate |
| 1:45 PM | | | | Food of don 4 |
| 2:00 PM 2:15 PM | | | | End of day 4 |
| 2:30 PM | | | | |
| 2:45 PM | | | | |
| 3:00 PM | | | | |
| 3:15 PM | | | | |
| 3:30 PM | consultancy MARIN | consultancy MARIN | consultancy MARIN | consultancy MARIN |
| 3:45 PM | | | | |
| 4:00 PM | | | | |
| 4:15 PM | | | | |
| 4:30 PM | | | | |
| 4:45 PM | | | | |
| 5:00 PM | | | | |
| 5:15 PM | | | | |
| 5:30 PM | | | | |