



MT004: 4 days course on Ship Resistance and Propulsion



24-27 June 2019

Marine Technology Centre, Universiti Teknologi Malaysia
Johor Bahru, Johor, Malaysia

COURSE OBJECTIVES

This course introduces to the ship resistance and propulsion. The content of this course is focusing in discussion of the resistance prediction methods and propeller design. After completing this course, the participants should be able to:

- Describe the various components of ship resistance;
- Calculate resistance and powering using methodical series;
- Differentiate the various concepts of ship propulsion devices;
- Describe propeller design procedures.

METHODOLOGY

- Lecture, discussion, laboratory demonstrations.

ASSESSMENT

- In-class exercises, final test.

WHO SHOULD ATTEND

- Engineers, technical personal

FEE

- RM 2000 / per participant

COURSE CONTENTS

1. Resistance Prediction Methods
2. Estimating Horsepower
3. Ship Model Testing
4. Propeller Geometry and Drawings
5. Propeller Theory
6. Propeller Design Procedures
7. Propulsion Devices and Powering
8. The Quest for Higher Speeds

Duration
(Hours)

5
2
3
2
2
4
4
2

COURSE TUTORS

- Prof. Dr. Omar bin Yaakob
- Prof. Dr. Adi Maimun bin Abdul Malik
- Dr. Nik Mohd Ridzuan bin Shaharuddin
- Dr. Siow Chee Loon

CONTACT US

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(Also welcome for any inquiry on customised / in-house training programmes)



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Prof. Dr. Omar Yaakob is a Professor of Naval Architecture at the Dept. of Aeronautics, Automotive and Ocean Engineering, School of Mechanical Engineering at Universiti Teknologi Malaysia. Specializes mainly in the field of marine technology, ship design, hydrodynamics, marine renewable energy, marine remote sensing, physical oceanography, marine environment, marine transport, management and operation, he had taught, conducted research and consultancy work in the said field and had published over 100 papers in conferences and journals. His most current research project is in the title of New Concept Of Wave Energy-Breakwater Device.



Prof. Dr. Adi Maimun is a Professor of Naval Architecture at the Dept. of Aeronautics, Automotive and Ocean Engineering, School of Mechanical Engineering. Specializes mainly in the field of Marine Vehicles/Structures Dynamics using CFD, time domain simulations and experimental work, he had taught, conducted research and consultancy work in the said field and had published over 50 papers in conferences and journals. One of his research project is the Shell Malaysia's Malikai Deepwater Riser project, a collaboration of UTM Marine Technology Center and SHELL through working to overcome the technical challenge of vortex-induced vibration, have developed new technologies that will be used in Shell's future deepwater rigs around the world.



Dr. Nik Mohd Ridzuan Shaharuddin is the coordinator for Post Graduate study in MSc (Ship and Offshore Engineering) in Faculty of Mechanical Engineering (FME) at Universiti Teknologi Malaysia. During his Ph.D., he worked on the application wave resistance to the floating structures, includes the active control in suppressing the Vortex Induced Vibration (VIV) of modelled segmented marine riser. His research interest includes Vortex induced vibration, active and passive controls, drag reduction devices and renewable energy.



Dr. Siow Chee Loon is a senior lecturer in School of Mechanical Engineering (SME) at Universiti Teknologi Malaysia (UTM). He research area is focusing in hydrodynamic especially in wave induce motion and propulsion of floating structure. He experience in conducting model experiment in wave basin tank, development of numerical programming for wave structure interaction analysis and using commercial software to simulate wave structure motion.