



**Society of  
FLOATING SOLUTIONS  
(Singapore)**

# Naval Architecture Short Course: Fundamentals for Floating Structures

## INTRODUCTION

In this year's National Day Rally, Prime Minister Lee Hsien Loong highlighted the effects of climate change and outlined various measures on preparing Singapore for rising sea levels. The Ministry of Environment and Water Resources projected that Singapore's mean sea levels would rise by up to one metre by 2100; this could, however, occur earlier. Land reclamation has become more challenging year by year and unsustainable. Fortunately, Singapore has about 700 sq km of territorial waters well sheltered by a cluster of Indonesian islands to the south.

We believe these open up huge opportunities and sustainable alternatives for creation of sea space floating solutions for the future. It would be a great opportunity to learn how floating solutions can contribute to Singapore's quest for more space, thereby freeing up land for housing etc. and reducing the country's carbon footprint.

## COURSE OBJECTIVE

The course is specially designed to provide non-maritime and maritime professionals an appreciation of the concepts, principles and design methodologies of floating structures.

Participants will build up a good knowledge of floating structures and acquire better understanding of offshore technologies as well as their applications to offshore infrastructures and floating facilities such as fuel storage, power plants, shipyards, farms, ports, golf courses, bridges, recreation parks and floating cities etc.

## SUPPORTERS OF COURSE



Centre for Offshore Research & Engineering  
Faculty of Engineering

## ORGANISER

Society of FLOATING SOLUTIONS (Singapore)

## DATE

25-26 February 2020

## VENUE

Newcastle Research and Innovation Institute (NewRIIS)

80 Jurong East Street 21  
#05-04

Devan Nair Institute for Employment and Employability  
Singapore 609607



## WHO SHOULD ATTEND THIS TRAINING COURSE?

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Architects, city planners, maritime policy makers, civil and structural engineers, developers, academics, researchers and other maritime or construction professionals who want to expand into floating solutions.

## COURSE CONTENT

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- Floating Structures & Applications
- Design Principles & Considerations
- Classification Rules for Floating Structures
- Buoyancy, Weight & Stability
- Wave Excitation and Motion Analysis
- Structural Strength & Material
- Connection System for Multiple Floating Units
- Mooring System
- Construction and Installation
- Case Studies



## COURSE PRESENTERS

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- Mr LIM Soon Heng, President of the Society of Floating Solutions (Singapore)
- Dr KOH Hock Seng, 2<sup>nd</sup> Vice President of the Society of Floating Solutions (Singapore)
- Mr NG Chun Wee, Senior Engineer/Project Manager - DNV GL Approval Centre, Singapore
- Mr Rasim ASGAROV, Director - Brigantine Marine Consulting
- Dr Arun DEV, Associate Professor - Newcastle University
- Dr TAY Zhi Yung, Assistant Professor - Singapore Institute of Technology
- Mr Henry, HAN Lei, Managing Director - Hanns-Ocean Pte Ltd
- Mr Anil THAPAR, Head of Floating Structures - BMT
- Mr Ivan STOYCHEV, Member of the Society of Floating Solutions (Singapore)
- Dr ANG Kok Keng, Associate Professor - National University of Singapore
- Dr WAN Ling, Assistant Professor - Newcastle University

## REGISTRATION

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The registration fee includes a hardcopy of training course materials, coffee/tea breaks and lunches.

Interested participants should register online and complete the payment:

For SFSS members: 400 SGD

For non-SFSS members: 480 SGD

Registrations will close Friday, 7 February 2020 or once capacity is reached.

For online Registration, please visit [here](#)

For more information, please visit: <https://floatingsolutions.org>

For email enquiry or group discount for registration of 3 or more persons from the same company, please email: [enquiries@floatingsolutions.org](mailto:enquiries@floatingsolutions.org)



### PRELIMINARY PROGRAMME

Following is the preliminary programme for the two days. The order of the modules may change.

Day 1	Tuesday, 25 February 2020	Presenter
8.30am	Registration	
9.00am	Floating Structures & Applications	LIM Soon Heng
10.00am	Break	
10.20am	Design Principles & Considerations	Dr KOH Hock Seng
11.30am	Classification Rules for Floating Structures	NG Chun Wee
12.30pm	Lunch	
13.30pm	Buoyancy, Weight & Stability	Rasim ASGAROV
15.00pm	Break	
15.20pm	Wave Excitation and Motion Analysis	Dr Arun DEV
17.00pm	End of Day	

Day 2	Wednesday, 26 February 2020	Presenter
9.00am	Structural Strength & Material	Dr TAY Zhi Yung
10.30am	Break	
10.50am	Connection System for Multiple Floating Units	Henry, HAN Lei
11.55am	Project Case Study: Floating Bridges	Dr WAN Ling
12.25pm	Lunch	
13.25am	Mooring System	Anil THAPAR
14.30pm	Construction and Installation	Ivan STOYCHEV
15.30pm	Break	
15.45pm	Project Case Study: <ul style="list-style-type: none"> <li>- Multi-Purpose Floating Structures</li> <li>- Float@Marina Bay</li> </ul>	Dr ANG Kok Keng Dr KOH Hock Seng / Anil THAPAR
16.50pm	Closing	
17.00pm	End of Day	