



Hydrodynamics of Floating Offshore Structures

Course 2019

This course is intended for both existing professional staff and for newcomers in the maritime industry. Participants should have a university degree in naval architecture, ocean engineering, equivalent education or experience.

When:

March 18 – 22 (5 days) 2019

Where:

MARIN Wageningen,
The Netherlands

Costs:

€4.000,00 (including lunches
and course dinner on Thursday)

Registration:

www.marin.nl/courses

Hotel De Wageningsche Berg

www.hoteldewageningscheberg.nl

€ 91,50 per night including breakfast

Hotel WICC

www.wicc.nl

€ 82,50 per night including breakfast

For more information please contact: courses@marin.nl

For conditions see page 2.



Contact

Application

To ensure your participation (number of participants is limited), please fill in the registration form at: www.marin.nl/courses or send an e-mail to: courses@marin.nl.

Payment

Fee is to be paid upon receipt of invoice with a deadline of at least 14 days prior to the first day of the course.

Payment made payable to:
MARIN, The Netherlands;
Account number 53 93 39 156,
IBAN number
NL77ABNA0539339156

Conditions

Venue

The course will be held at MARIN, Haagsteeg 2, Wageningen, The Netherlands or nearby MARIN (5 minutes' walk from MARIN).

Accommodation

Hotel accommodation is not included in the course fee. However, MARIN intends to make reservations at a special course rate. Hotel WICC is 10 minutes' walk from MARIN. Hotel Wageningsche Berg is 20 minutes by bike or 10 minutes by taxi or car (transfers are not included in the course fee).

Documentation

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

Number of participants

The course is subject to a minimum number of participants (12) and a maximum (24). Admittance to the course will be on first come first served basis. The following group reduction is valid:

No. Participants	Reduction	Price	Reduced price
1	0%	€ 4,000.00	€ 4,000.00
2	0%	€ 8,000.00	€ 8,000.00
3	10%	€ 12,000.00	€ 10,800.00
4	10%	€ 16,000.00	€ 14,400.00
5	10%	€ 20,000.00	€ 18,000.00
6	20%	€ 24,000.00	€ 19,200.00

Payment

Fee to be paid upon receipt of invoice at least two weeks before the first day of the course concerned. Payment must be by cheque or international money order, made payable to: MARIN, The Netherlands; Account number 53 93 39 156, IBAN number NL77ABNA0539339156, ABN-AMRO Bank N.V., Amsterdam.

Cancellations

In case of a cancellation by the participant, the following rules apply:
Cancellation within 2 weeks of the start of the course: 100% of the course fee.
Cancellation within 1 month of the start of the course: 30% of the course fee.
In other cases the cancellation is free of charge.

In case MARIN has to cancel the course in view of insufficient participation, the entire fee will be refunded.

Application

To ensure your participation (number of participants is limited), please fill in the registration form on www.marin.nl/courses.

Application closing date: February 28, 2019

Course program “Hydrodynamics of Floating Offshore Structures” 2019

Time	MONDAY 18 MARCH	TUESDAY 19 MARCH	WEDNESDAY 20 MARCH	THURSDAY 21 MARCH	FRIDAY 22 MARCH		
					(A) Offshore Wind	(B) Structural Integrity	(C) CFD
8:45	Course kick-off 08:45 - 09:15	Coffee 08:45 - 09:00	Coffee 08:45 - 09:00	Coffee 08:45 - 09:00	Coffee 08:45 - 09:00	Coffee 08:45 - 09:00	Coffee 08:45 - 09:00
9:00	Introduction 09:15 - 09:45	Analysis of mooring systems 09:00 - 10:00	Offloading: single point tandem and side-by-side 09:00 - 10:30	Green water loading on FPSOs 09:00 - 10:15	Introduction 09:00-9:30	Introduction 09:00 - 9:30	Background theory of CFD 09:00 - 10:30
9:15							
9:30	Wave frequency motion theory and its applications 9:45-10:45	Break 10:00 - 10:15	Break 10:30 - 10:45	Break 10:15 - 10:30	Wind farm collision risk 09:30 - 10:15	Fatigue 09:30 - 10:30	
9:45							
10:00	Break 10:45 - 11:00	Analysis of mooring systems 10:15 - 11:15	Design and training of offshore operations 10:45 - 12:15	VIV / VIM 10:30 - 12:00	Fixed foundations 10:15 - 10:45	Break 10:30 - 10:45	Break 10:30 - 10:45
10:15							
10:15	Wind and current loads on offshore structures 11:00 - 12:00	Extreme environments 11:15 - 12:15	Break 10:30 - 10:45	Fixed foundations 10:45 - 12:00	Fixed foundations 10:45 - 12:00	Case study fatigue 10:45 - 12:00	Uncertainty analysis 10:45 - 11:15
10:30							Break 10:30 - 10:45
10:45	Course picture 12:00 - 12:15	Lunch 12:15 - 13:15	Lunch 12:15 - 13:15	Lunch and course contest BT (lunch + presentations) 12:00 - 13:00	Lunch 12:00 - 13:00		
11:00							
11:15	Case study wave frequency motions	Extreme wave loads on TLP and semis 13:15 - 14:15	Shallow water Hydrodynamic 13:15 - 14:45	Model tests 13:00 - 14:30	Floating foundations 13:00 - 14:30	Reliability analysis 13:00 - 13:45	Theory of moving objects 13:00 - 13:45
11:30						Sloshing 14:15 - 15:15	CFD for offshore applications 15:00 - 16:00
11:45	Introduction model tests 13:45 - 15:15	Break 14:30 - 14:45	Break 14:45 - 15:00	Operability analysis 15:45 - 17:30	Closing session 14:30 - 15:30		
12:00							
12:15	Lunch 12:15 - 13:15	Case study mooring 15:30 - 16:15	Dynamic Positioning (DP) 16:00 - 16:45	Operability analysis 15:45 - 17:30	Closing session 14:30 - 15:30		
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12:45	Break 15:15 - 15:30	Course contest (Design) 16:30 - 18:30	Case study DP 16:45-17:30	Feedback	Closing session 14:30 - 15:30		
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13:15	Excursion Facilities 15:30 - 16:00	Course contest (Model Production) 16:15 - 18:30	Dynamic Positioning (DP) 17:30 - 18:15	Free time	Closing session 14:30 - 15:30		
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13:45	Introduction course contest + hydrostatica 16:00 - 16:30	Feedback	Feedback	Free time	Closing session 14:30 - 15:30		
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