



# **Hydrodynamics of Floating Offshore Structures**

Houston, Monday November 4 – Wednesday November 6, 2024 Short interactive course

We at MARIN are more than happy to share our knowledge and expertise. Being a maritime research institute we do this every day, by working together with the industry through our commercial work and within Joint Industry Projects and Cooperative networks. Another way of sharing know-how is through the specialist courses we organise.

This intensive and interactive course will be held in Houston. The costs for the course "Hydrodynamics of Floating Offshore Structures" are \$ 2,400 including all documentation and lunches. As we want to stimulate interaction between the lecturers and the participants, the number of participants is limited to 12 this year, so an early registration is recommended.



Because technological developments change rapidly, we organise tailor made courses, always focusing on specific research subjects. Our 'trainers' are the project managers that work together with the industry each day. This approach provides knowledge that is more up-to-date and practical than typical training institutes. The course 'Hydrodynamics of Floating Offshore Structures' gives an overview of the latest developments, including extreme metocean conditions, wave impact, motion and mooring analysis (see course programme on the next page). MARIN organizes this course annually at its Wageningen facilities in the Netherlands, and since 2008 the course is held semi-annually in Houston. The next edition in Houston will be held in November 2024.

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.

The lectures will be supported by a dedicated case study which is both challenging and fun. During the course and case study there will be plenty of time to interact with the MARIN team. The course notes contain the full set of information as presented during the course.

### 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 offshore@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 NL77ABNA0539339156

#### Accommodation

Hotel accommodation is not included in the course fee

# **Conditions**

#### Venue

The Hydrodynamics of Floating Offshore Structures course will be held 4-6 November 2024 (3 days). The daily schedule is 9:00 to 18:00 hrs. A detailed schedule will be provided prior to the course. The course will be held in Houston.

#### **Documentation**

The course notes contain the full set of information as presented during the course. The course notes will be available digitally. 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 (8) and a maximum (12) number of participants. Admittance to the course will be on first come first served basis. The following group discount will apply:

No. Participants	Reduction	Price	Reduced price
1	0%	\$ 2,400.00	\$ 2,400.00
2	0%	\$ 4,800.00	\$ 4,800.00
3	10%	\$ 7,200.00	\$ 6,480.00
4	10%	\$ 9,600.00	\$ 8,640.00
5	20%	\$ 12,000.00	\$ 9,600.00
6	20%	\$ 14,400.00	\$ 11,520.00

#### **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.

#### Conditions of sales

The normal MARIN Conditions of Sales apply. Please download here: Terms and Conditions or go to www.marin.nl/en/terms-and-conditions.

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# Concept course programme "Hydrodynamics of Floating Offshore Structures"

Time	Monday November 4, 2024	Tuesday November 5, 2024	Wednesday November 6, 2024	
8:45 - 9:00	Coffee			
9:00 - 10:00	Introduction	Analysis of mooring system	Autonomy & Decision Support	
10:00 - 11:00	Linear wave theory & hydrostatics		Control & Dynamic Positioning	
11:00 - 12:00	Wave frequency motions	Shallow water hydrodynamics	Design and training of offloading operations	
12:00 - 13:30	Lunch	Lunch	Office lunch with Case study Offshore Operations (Simulator)	
13:30 - 14:30	Case study wave frequency motions	Case study mooring	Offshore lift operations	
14:30 - 15:30	Non-linear wave theory & statistics	Extreme wave loads	Course contest	
15:30 - 16:30	Introduction to Model Tests	Design Aspects of Floating Offshore Wind	(Model tests)	
16:30 - 18:30	Course contest (Design)	Course contest (Model production)		