



IMarEST and
SUT Members

Save £335

Contact: events@imarest.org



Metocean Awareness Course

An essential course providing a greater understanding of metocean and its implications for offshore design and operations

Tuesday 20 – Thursday 22 September 2016

London

Metocean is a discipline covering meteorology and physical oceanography, and is concerned with quantifying the impact and effect of weather and sea conditions on a wide range of activities in the offshore oil & gas & renewable energy sectors.

This is an essential course providing a greater understanding of metocean and how the application of metocean information can benefit your organisation particularly with respect to:

- ▶ Improved safety
- ▶ Better decision-making and planning
- ▶ Reduced costs

Comments from delegates who attended previous courses:

“ The presenters were excellent in sharing their experience and input to issues faced by participants in their work ”

“ I’ve been very lucky to attend many training courses this year, but this is the most interesting and useful one I’ve been on. ”



Further information:
www.imarest.org/events
Email: events@imarest.org
or telephone:
+44 (0)207 382 2702

WHY WILL THIS COURSE BENEFIT YOU?

For all offshore industries, the effects of meteorology and oceanography (metocean) have a major impact on design and operations. If users of metocean information are not aware of the implications that the weather, waves, currents and water levels can have on their operations or design work, then things can go wrong with serious health and safety and economic consequences.

The **Metocean Awareness Course** is aimed at those who need to have a greater understanding of metocean conditions worldwide and how they might impact the effectiveness of their work.

The course format includes a mixture of short presentations delivered by expert speakers in this field. Delegates will receive a comprehensive course manual on attendance.



WHO SHOULD ATTEND?

This course is essential for Project Managers and Engineers in the offshore oil and gas and renewables industries. It is suitable both for those involved in operations and design, new entrants to the industry and those with many years' experience. The course will enable delegates to interact with expert speakers and other delegates from various backgrounds who use or provide metocean data.

COURSE SCHEDULE

DAY 1

- 10.30** Refreshments
- 11.00** **Introduction**
Welcome/HSE/Admin/Housekeeping/
IMarEST/Introductions & Icebreaker/
Course Objectives & background
- 12.00** Metocean Experiences
- 12.30** Lunch
- 13.30** Introduction to Metocean - Setting the Scene
- 14.00** **Metocean Parameters & Processes**
Atmospheric & ocean circulation
Winds, waves, currents, water levels & ice
- 15.30** Refreshments
- 15.45** **Data Acquisition & QC**
Measurements, models & satellites
QC of data & archiving
- 17.15** **Learning Exercise**
Metocean Quiz - Day 1
- 17.45** Close
- 18.00** Drinks reception

DAY 2

- 08.30** Refreshments
- 09.00** **Weather Forecasts**
How are forecasts produced
Forecast Products
Exercise
- 10.15** Refreshments
- 10.30** **Operational Statistics**
Developing Metocean statistics for operational
planning eg weather windows
Exercise

EXPANDED LEARNING OUTCOMES

Requirements for Metocean criteria and statistics – the application

After completion of the course, participants will:

- ▶ have an understanding of how and why metocean is important to the offshore oil and gas and marine renewables industries for safe and economic operations, through each phase of field development/operation from initial acreage acquisition to field abandonment;
- ▶ be able to engage internal and external stakeholders about metocean matters and their impact.

Metocean parameters and processes and metocean conditions around the world

After completion of the course, participants will:

- ▶ have a broad understanding of the key meteorological and oceanographic parameters which impact offshore design and operations;
- ▶ be able to describe the metocean conditions in the various regions around the world where the offshore oil and gas industry and marine renewables industry operates;
- ▶ know from where they can obtain more metocean information and advice;
- ▶ be able to converse more knowledgeably about climate change

DAY 2 – continued

12.30 Lunch

13.30 Design Criteria

Developing 100yr extremes
Extreme Value Analysis (EVA)
Joint probability
Uncertainty
Exercise

15.30 Refreshments

15.45 Data Trends & Climate Variability

16.45 Learning Exercise

Metocean Quiz - Day 2

17.30 Close

18.00 Course dinner

DAY 3

08.30 Refreshments

09.00 Metocean conditions around the World

Ice (Arctic, Caspian)
Temperate (North Sea, Atlantic Margin)

10.15 Refreshments

Metocean conditions around the World - continued

10.30 Tropical (Gulf of Mexico, West Africa, SE Asia)

11.15 Course Conclusions

Wrap up/Feedback
What have we learned?
What will we do differently?
Future training and quiz results

12.30 Lunch

APPLICATION FORM – Metocean Awareness Course

Tuesday 20 – Thursday 22 September 2016
London

Instructions: Please print clearly or attach business card and photocopy this form for further delegates.

PERSONAL INFORMATION

IMarEST/SUT Membership Number _____

Full name _____

Job title _____

Organisation/company _____

Address _____

City _____

County _____

Postcode _____

Telephone _____

Email _____

METOCEAN AWARENESS COURSE RATES: (please tick)

IMarEST/SUT Member rate: £1480 + VAT

Non-Member rate: £1815 + VAT

Registration fees include: extensive course materials, daily refreshments over the 3 days, one evening drinks reception and one course dinner.

For full details on terms and conditions including cancellation policy, venue and accommodation visit: www.imarest.org/events

Delegates will receive one year's complimentary Affiliate IMarEST membership.

PAYMENT INFORMATION:

Please invoice VAT receipt Cheque

Bank transfer payable to IMarEST

Barclays Bank, 1 Churchill Place, London E14 5HP

Bank Sort Code: 207767 Account Number: 70517291 Ref: MACUK + delegate surname.

Credit card (please fill in details below) The total fee due will be debited in full on receipt of your registration form. Amex Mastercard Visa

Card number

Card holder's name _____

Signature _____ Expiry date _____

Start date _____ Issue number (if applicable) _____

Security Code (last 3 digits on the back of your card) (Four for AMEX)

Address at which card is registered _____

ADDITIONAL REQUIREMENTS:

Vegetarian/special dietary meals Access requirements (please specify)

You will receive a confirmation email, an invoice or VAT receipt and further information on receipt of your application form.

Metocean data sources, data quality control, archiving and climate variability

After completion of the course, participants will:

- ▶ be able to describe the various methods of acquiring metocean data, the issues involved, the indicative costs and trends for the future;
- ▶ be aware of safety guidelines (OGP) and the inherent risks of in-field data collection;
- ▶ be aware of vessel requirements to undertake instrument deployment;
- ▶ have an understanding of data processing, quality control and data archiving;
- ▶ know from where they can obtain more relevant information and advice;
- ▶ be able to describe the process of numerical modelling of winds, waves and currents; the limitations and accuracy of results.

Weather forecasting

After completion of the course, participants will:

- ▶ have an understanding of how weather and ocean forecasts are derived, their accuracy and how they are presented;
- ▶ know from where they can obtain more relevant information and advice.

Operational statistics and design criteria

After completion of the course, participants will:

- ▶ know how metocean conditions are presented statistically and are used for design in various scenarios;
- ▶ be able to specify the process for undertaking design criteria studies and for preparing operational planning statistics reports;
- ▶ know from where they can obtain more relevant information and advice.