

OSIGp Geohazards & Geotechnics Course

For Offshore O&G and Windfarm Developments

2 Day Course

THURSDAY 20 - FRIDAY 21 JULY, 2023

OceanWorks Lounge, The University of Western Australia



WHAT YOU CAN EXPECT FROM THE COURSE?

This course is an introduction to geoscience and geotechnical engineering, comprised of hand-picked topics that are relevant to general offshore developments, and also to developments sited on carbonate-rich areas. The course is delivered by industry and academic experts, and broadly covers the following:

- ▶ Introduction to the different geological environments present offshore Australia and in other regions, ranging from shallow water through to deep water.
- ▶ Overview of how an integrated ground model can be used to reduce risk and increase value of offshore projects.
- ▶ Presentations on best practice for the collection of data for site characterisation, design and geohazard mitigation.
- ▶ Introduction to engineering design and installation of subsea geotechnical infrastructure, including shallow foundations, deep foundations, anchors & pipelines, illustrated with numerous case histories.
- ▶ Laboratory tours at UWA to give 'hands on' experience of soil element testing and physical modelling (including UWA's centrifuge facilities and O-tube flumes).

WHY YOU SHOULD ATTEND THIS COURSE?

This two-day course explains offshore geology, geohazards and geotechnical engineering, adopting a holistic approach to show how they interact and how an improved understanding of all three disciplines can lead to optimised infrastructure solutions, with applications on offshore oil and gas and windfarm developments.

WHO SHOULD ATTEND?

The course is aimed at an audience with no or limited knowledge of geosciences. It is suitable for subsea and offshore operators and contractors from both the oil and gas and offshore renewable industries, anyone who is a part of the supply chain that supports the operation or maintenance of offshore and subsea systems, students and academics who want to learn about industry practices in offshore geotechnics, and those returning or new to the subsea industry.

COURSE SCHEDULE

DAY 1	THURSDAY 20 JULY 2023
08.00	Registration
08.20	SUT & delegate introduction, Housekeeping/safety
08.30	Course Outline Michael Cocjin, Fugro - Overview/outline of course - Role of G&G in offshore developments
09.00	Experiences & Learnings Phil Watson, UWA Overview of legacy projects and learnings from Northwest Shelf
09.45	OWF Developments in Australia Owen Wilson (NOPSEMA)/ Andrew Grime (Arup/UWA) Short overview of planned OWF developments in Australia, project status/timelines, challenges (project delivery, supply chains, etc.
10.30	Morning Tea
10.45	Design Philosophy Laith Tapper, NGI Overview of a typical offshore projects looking at the following: - project timeline - project risks - design considerations
11.30	Geological Framework 1 Rosine Riera, NGI - definition and fundamentals of geology and sedimentology - regional NWS geomorphology, stratigraphy and sediments
12.15	Lunch
13.00	Geological Framework TBC Regional NSW/Victoria/WA geomorphology, stratigraphy and sediments
13.45	Geohazards Kevin Day, Ten Point Interpretation - What is a geohazard? - Static geohazards - Dynamic geohazards - Geohazard assessment
14.45	Afternoon Tea
15.00	Site Characterisation 1 Damon Sunderland, Arup - ground modelling - SI planning process - positioning - geomatics & mapping- - metocean data & climate - geophysical acquisition - geotechnical acquisition
15.45	Site Characterisation 2 Cathal Coireavy, NGI - sampling techniques/disturbance - soil logging - laboratory tests for soil characterisation - data integration and reporting
16.30	Networking Event

DAY 2	FRIDAY 21 JULY 2023
08.30	Lab tour
10.30	Tea/Coffee break
10.45	Engineering Solutions 1 Fraser Bransby, UWA - subsea mudmats - flowlines/pipelines inc. pipeline stabilisation - subsea cables - foundations for floating facilities (inc. risers, mooring, anchor foundations
11.30	Engineering Solutions 2 Carl Erbrich, Fugro - jacket foundations - foundations for wind turbines and generators - jack-ups - seismic design
12.15	Lunch
13.00	Sediment Transport & Scour Scott Draper (UWA)/Matt Allen (MMA Offshore) - sediment transport and scour - engineered scour protection
13.45	Designing for Installation Rick Gillinder, Fugro - O&G related - pipelines & flowlines - shallow foundations (suction buckets) - deep foundations
14.30	Installation of Floating Wind John Morton, 2HOffshore - OWF related - monopiles and turbines - subsea cables
15.15	Afternoon Tea
15.30	Future Horizons Phil Watson, UWA - new technonology / R&D - big data - autonomous/robotics surveys - geotechnics from geophysics - integrated system design
16.30	Course Wrap-up & Certification Michael Cocjin, Fugro - certification - feedback

Thankyou to our presenting companies:



REGISTRATION FORM

OSIGp Geohazards & Geotechnics Course for Offshore O&G and Windfarm Developments 20-21 July 23

SUT Membership Number

Full name

Job title

Organisation/company

Address

City

County

Postcode

Telephone

Email

Signature

Course fees inc GST: (please tick)			
Member Early Bird	\$1,200	AUD	<input type="checkbox"/>
Member	\$1,495	AUD	<input type="checkbox"/>
Non-member EB	\$1,430	AUD	<input type="checkbox"/>
Non-member	\$1,780	AUD	<input type="checkbox"/>
Student Member	\$480	AUD	<input type="checkbox"/>

The prices above are **inclusive** of GST
Early Bird rates apply to all bookings paid by 20 June 2023. All bookings received from 21 June 2023 will be charged at the standard rate.

Cancellations: Refunds will be made on written cancellation received up to 10 working days prior to the event, but will be subject to a 15% administration charge. Cancellations received 9–4 working days prior to the event will be charged a 50% cancellation fee. Cancellations received 3–0 working days prior to the event will not be refunded. Delegates may send a substitute in their place at no charge. Should there be any COVID related shutdowns that impact this course it will be run online instead of in person.

Please submit your registration to:
Tel: + 61 (0) 8 9481 0999
Email: perthevents@sut.org

PAYMENT INFORMATION:
Please invoice (PO NO.) ☐
or
Credit Card ☐

Credit card Mastercard, Visa or AMEX* ONLY.
**Payment by AMEX wil carry a 2.75% & Visa 1.5% surcharge*
☐ Amex ☐ Mastercard ☐ Visa
Card number
Card holder's name
Signature
Expiry date
Start date
Issue number
Security Code (last 3 digits on the back of your card):
Email address to send receipt:

☐ Please tick here if you do not want to receive our weekly newsletter.

Please list any dietary requirements you have: