

OSIGp Geohazards & Geotechnics Course

For Offshore O&G and Windfarm Developments

2 Day Course

THURSDAY 24 - FRIDAY 25 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 08.00	THURSDAY 24 JULY 2025 Registration	DAY 08.30
08.20 08.30	SUT & delegate introduction, Housekeeping/safety Course Outline Nicole Fiumana, WSP & Bryan Bergkam,	10.3
	Fugro - Overview/outline of course - Role of G&G in offshore developments	10.4
09.00	Experiences & Learnings Phil Watson, UWA Overview of legacy projects and learnings from Northwest Shelf	
09.45	OWF Developments in Australia Andrew Grime, Arup Short overview of planned OWF developments in Australia, project status/timelines, challenges (project delivery, supply chains, etc.	11.3
10.30	Morning Tea	
10.45	Design Philosophy Laith Tapper, NGI Overview of a typical offshore projects looking at the following:	12.1
	 project timeline project risks design considerations 	13.0
11.30	Geological Framework 1 Colin McGovern, WSP & Christine Devine, WSP - definition and fundamentals of geology and sedimentology - regional NWS geomorphology, stratigraphy and sediments	13.4
12.15	Lunch	
13.00	Geological Framework 2 Colin McGovern, WSP & Christine Devine, WSP Regional NSW/Victoria/WA geomorphology, stratigraphy and	14.3
13.45	sediments Geohazards Kevin Day, Ten Point Interpretation	
	- What is a geohazard? - Static geohazards	15.1
	- Dynamic geohazards - Geohazard assessment	15.3
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	16.3
15.45	Site Characterisation 2 Cathal Colreavy, NGI - sampling techniques/disturbance - soil logging	A
	 laboratory tests for soil characterisation data integration and reporting 	\sn
16.30	Networking Event - The Hampden	۱SD

DAY 2	FRIDAY 25 JULY 2025
08.30	Lab tours
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 Marcelo Silva, Fugro - jacket foundations - foundations for wind turbines and generators - jack-ups - seismic design
12.15	Lunch
13.00	Sediment Transport & Scour Scott Draper, UWA - 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 OWT Foundations John Morton, 2HOffshor (Recorded session) - OWF related - monopiles and turbines - subsea cables
15.15	Afternoon Tea
15.30	Future Horizons Fraser Bransby, UWA - new technonology / R&D - big data - autonomous/robotics surveys - geotechnics from geophysics - integrated system design
16.30	Course Wrap-up & Certification Nicole Fiumana, WSP & Bryan Bergkam, Fugro - certification - feedback
T	Fhank you to our presenting companies:
AR	UP TUGRO NGI

REGISTRATION FORM

OSIGp Geohazards & Geotechnics Course for Offshore O&G and Windfarm Developments 24-25 July 24

SUT Membership Num	ıber	PAYMENT INFORMATION:	
Full name		Please invoice (PO NO	.)
Job title		or Credit Card	
Organisation/company	V	orean oard	
Address	City	Credit card Mastercard, Visa or AMEX* ONLY. *Payment by AMEX wil carry a 2.75% & Visa 1.5% surcharge	
	•	• Amex • Mastercard	o Visa
County	Postcode	Card number	
Telephone		Card holder's name	
Email		Signature	Expiry date
Signature		Start date	Issue number
		Security Code (last 3 digits	on the back of your card):
Course fees inc GST: (please tick)	Email address to send receipt:	
Member Early Bird	\$1,200 AUD 🔲		
Member Non-member EB Non-member Student Member	\$1,495 AUD \$1,430 AUD \$1,780 AUD \$480 AUD	Please tick here if you do not want to receive our weekly newsletter.	
	•••••	Please list any dietary requirements you have:	
The prices above are inclusive o	f GST		
Early Bird rates apply to all bool 25 June 2025 will be charged a	kings paid by 24 June 2025. All bookings received from It 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.