

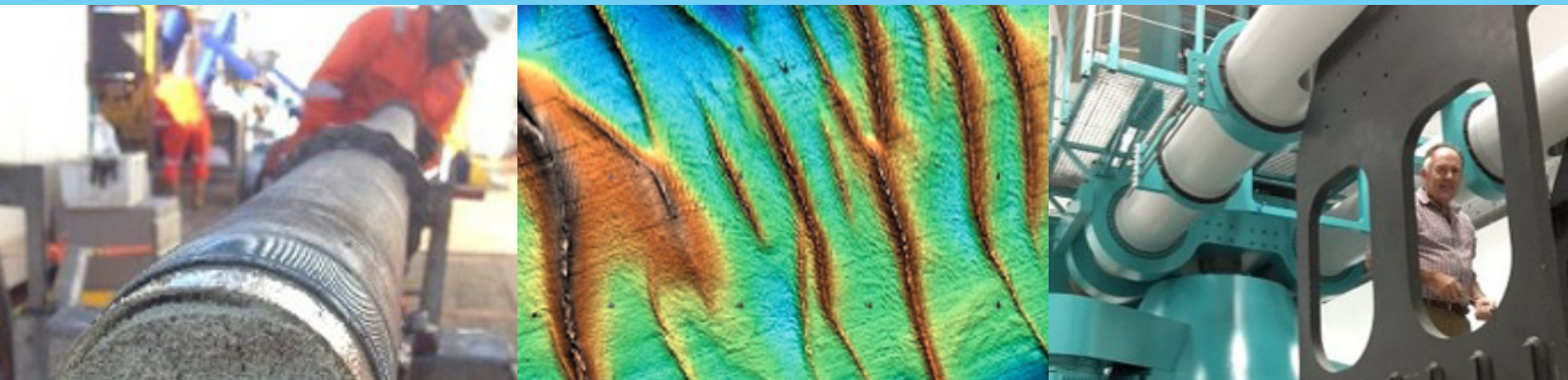
OSIGp Geohazards & Geotechnics Course

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** [Michael Howard OPSEMA, 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 2** [Ulysse Lebrec, UWA](#)
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 Colreavy, NGI](#)
- sampling techniques/disturbance
- soil logging
- laboratory tests for soil characterisation
- data integration and reporting
- 16.30 Networking Event - The Hampden

DAY 2 FRIDAY 21 JULY 2023

- 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** [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](#)
- 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, 2HOffshore](#)
[\(Recorded session\)](#)
- OWF related
- monopiles and turbines
- subsea cables
- 15.15 Afternoon Tea
- 15.30 **Future Horizons** [Phil Watson, UWA](#)
- new technology / R&D
- big data
- autonomous/robotics surveys
- geotechnics from geophysics
- integrated system design
- 16.30 **Course Wrap-up & Certification** [Michael Cocjin, Fugro](#)
- certification
- feedback

Thank you to our presenting companies:



REGISTRATION FORM

Please submit your registration to:

Tel: + 61 (0) 8 9481 0999

Email: perthevents@sut.org

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.

PAYMENT INFORMATION:

Please invoice (PO NO.)
or
Credit Card

Credit card Mastercard, Visa or AMEX* ONLY.

*Payment by AMEX will 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: _____