

# OSIGp Geohazards & Geotechnics Course

For Offshore O&G and Windfarm Developments

**2 Day Course**

**THURSDAY 24 - FRIDAY 25 JULY, 2025**

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 24 JULY 2025

- 08.00 Registration
- 08.20 **SUT & delegate introduction, Housekeeping/safety**
- 08.30 **Course Outline** [Nicole Fiumana, WSP](#)
- 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** [Andrew Grime, Arup](#)
- 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** [Colin McGovern, WSP & Christine Devine, WSP](#)
- definition and fundamentals of geology and sedimentology
  - regional NWS geomorphology, stratigraphy and sediments
- 12.15 Lunch
- 13.00 **Geological Framework 2** [Colin McGovern, WSP & Christine Devine, WSP](#)
- 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](#)
- sampling techniques/disturbance
  - soil logging
  - laboratory tests for soil characterisation
  - data integration and reporting
- 16.30 Networking Event

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

Thank you to our presenting companies:

ARUP

FUGRO

NGI

WSP



# REGISTRATION FORM

Please submit your registration to:

Tel: + 61 (0) 8 9481 0999

Email: [perthevents@sut.org](mailto:perthevents@sut.org)

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

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 24 June 2025. All bookings received from 25 June 2025 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: \_\_\_\_\_