

# Offshore Geohazards & Geotechnics

**Risks & Opportunities**  
**1 Day Course**

**Wednesday 26th May, 2021**

Oceanworks Room, University of Western Australia



**This one-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.**

This is an essential 1 day course providing a greater understanding of the offshore geology environment. Upon completion of the course our expert presenters will have covered the following topics:

- ▶ Overview/Setting the scene
- ▶ Design Philosophy
- ▶ Designing for Installation
- ▶ Geology of the North West Shelf
- ▶ Geohazards and Georisks
- ▶ Desk Studies, Geophysical Surveys
- ▶ Geotechnical Investigations & Integration
- ▶ Characterisation of the Seabed in Shallow & Deep Water
- ▶ Deep Water, Shallow Water
- ▶ Future Horizons

## **WHY WILL THIS COURSE BENEFIT YOU?**

This course will introduce the different geological environments present offshore Australia and in other regions, ranging from shallow water through to deep water. It will explain how an integrated ground model can be used to reduce risk and increase value and show best practices for the collection of data for site characterisation, design and geohazard mitigation.

Presenters will illustrate the geotechnical design of geotechnical infrastructure, including shallow foundations, deep foundations, anchors and pipelines, illustrated with numerous case histories.

The course will include demonstrations of equipment and laboratory tours at UWA to give 'hands on' experience of seabed sediments, soil element testing and physical modelling (including UWA's centrifuge facilities and O-tube flumes).

## **WHO SHOULD ATTEND?**

This course is aimed at an audience with no or limited knowledge of geosciences, therefore it is well suited to students, recent graduates and those that are new to the industry.

Comments from delegates who attended previous courses:

*" Site visits were an excellent idea – helps to visualise the equipment first hand. "*

# COURSE SCHEDULE

## DAY 1 WEDNESDAY 26 MAY 2021

08.00	Registration	13.00	<b>Desk Studies, Geophysical Surveys, Geotechnical Investigations and integration</b> Steve Tyler, Woodside Energy, & Damon Sunderland, ARUP Different survey and investigation methods. New techniques. Benefits & development how to of an integrated ground model
08.25	<b>SUT &amp; delegate introduction</b>	13.45	<b>Characterisation of the Seabed in Shallow and Deep Water</b> Cathal Colreavy, NGI & Scott Draper, UWA
08.30	<b>Housekeeping/Safety</b>	14.30	Afternoon Tea
08.35	<b>Setting the Scene</b> Phillip Watson, UWA & Damon Sunderland, ARUP Geotechnical overview of developments on the North West Shelf of Australia. Objectives of a reliability strategy. Importance of geohazards and geotechnics.	15.00	<b>Deep Water</b> Fraser Bransby, UWA Geotechnical solutions for foundations, anchors and pipelines
09.20	<b>Design Philosophy</b> Laith Tapper, NGI Project timelines. Managing risk and opportunities. Design cases. Selection of factors of safety. Reliability-based design and risk analysis. Installation risks and constraints.	15.45	<b>Shallow Water</b> Carl Erbrich, Fugro Geotechnical solutions for foundations, anchors and pipelines
09.50	<b>Designing for Installation</b> Rick Gillinder, Fugro	16.30	<b>Future Horizons</b> Phillip Watson, UWA
10.20	Morning Tea	16.45	<b>Conclusions &amp; Wrap up</b> Damon Sunderland, ARUP
10.40	<b>Geology of the North-West Shelf</b> Andy Lane, NGI		
11.25	<b>Geohazards &amp; Georisks</b> Kevin Day, Ten Point Interpretation		
12.10	Lunch		

A laboratory tour will take place during the lunchbreak

Thankyou to our presenting companies:



# REGISTRATION FORM

## Offshore Geohazards & Geotechnics Course 26 May 2021

Please complete the form below and submit via email to perthevents@sut.org to confirm your registration.

SUT Membership Number \_\_\_\_\_  
 Full name \_\_\_\_\_  
 Job title \_\_\_\_\_  
 Organisation/company \_\_\_\_\_  
 Address \_\_\_\_\_  
 \_\_\_\_\_ City \_\_\_\_\_  
 County \_\_\_\_\_ Postcode \_\_\_\_\_  
 Telephone \_\_\_\_\_  
 Email \_\_\_\_\_  
 Signature \_\_\_\_\_

Course fees: (please tick)

Member	\$525 AUD	<input type="checkbox"/>
Non-member	\$620 AUD	<input type="checkbox"/>
Student Member	\$190 AUD	<input type="checkbox"/>

Please submit your registration to:

Renaë Drew  
 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 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: \_\_\_\_\_

*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.*

