Positioning & Survey

An Introductory Course

19-20 March 2025

Positioning and Survey underpin all aspects of the subsea environment.

From understanding the nature of the environment we are working in, the topography of the seabed, the geology of the seabed, the location of the assets on the seabed and how they may change over time. Upon completion of the course our expert presenters will have covered the following topics:

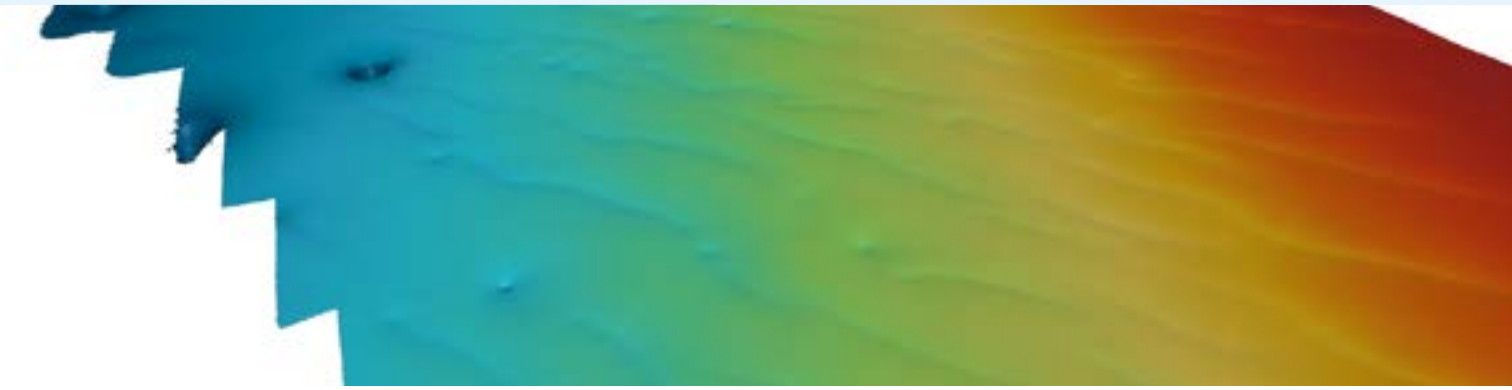
- Geodesy & Positioning Principles
- Surface Positioning
- Vessel Dynamics
- Tides & Currents
- Positioning Technology
- Case Studies
- Bathymetry
- Survey Data Processing
- Geophysics
- Remote Sensing Technologies

WHY WILL THIS COURSE BENEFIT YOU?

The Introduction to Positioning and Survey Course provides an introduction to these aspects of subsea to allow the participants to understand and appreciate the requirements for survey and positioning in their subsea undertakings.

WHO SHOULD ATTEND?

Anyone who works for an operator, contractor or part of the supply chain and is involved with exploration, construction and maintenance of subsea assets would benefit from learning how subsea assets are positioned, why in that location and how the information is acquired and maintained. Those returning to the subsea industry or joining for the first time would also benefit and gain exposure to the latest technology and operating practices.



Thank you to the presenting companies:

DOF Subsea · Fugro · REACH Subsea · MMA Offshore · Woodside · Woolpert · INPEX

COURSE SCHEDULE

WEDNESDAY 19TH MARCH

08.30 **Registration/Tea & Cofee**

09.00 **SUT Welcome & Introduction**

09.10 **Introduction & Overview**
Peter Wademan, Woodside Energy

09.30 **Autonomy & Remote Operations**
Phil Wells, MMA Offshore

10.00 Morning Tea

10.15 **Geodesy & Positioning Principles**
Barry Clifford, Woodside Energy
Datums & Coordinate Systems
Coordinate Reference Systems
Coordinate Transformations
MSL, Geoids & Mean Sea Surface Models

11.15 **Surface Positioning**
Ahmed Said, MMA Offshore
History of Surface Positioning
US, Russian, European & Chinese satellite systems
Accuracies and misconceptions
Impacts of phones, watches & automated technology
The future

12.15 Lunch Break

13.15 **Vessel Dynamics**
Bill Russell-Cargill, INPEX
Centre of gravity
Stability
Magnetic & Gyro Compass
Pressure point
Attitude sensors and calibration
Turning of vessels
Squat
Inertial Navigation Sensor

14.15 **Remote Sensing Technologies**
Glenn Morrison, Woolpert
Earth Observation: Satellites & Airborne
Laser Scanners & Photogrammetry
RADAR, LIDAR & Hyperspectral
New systems & application examples

15.15 Afternoon Tea

15.30 **Positioning Technology**
James McCawley, Fugro
Ultra Short Base Line
Long Base Line
ROV
INS
Metrology

16.45 Course Finish

THURSDAY 20TH MARCH

08.45 **Registration/ Tea & Coffee**

09.00 **Case Studies**
Phil Wells, MMA Offshore
Pluto Development
Equus Deepwater Pipeline Route

10.00 **The value of a Data Portal to manage a Hydrographic project**
Paul Kennedy, Reach Subsea
Does a portal add value or is it just a gimmick?
Is it worth the cost?
What layers are important?
Does it need to do everything?

10.45 Morning Tea

11.00 **Geophysics**
Giovanni De Vita, DOF Subsea
Introduction to geophysics
Methodologies and applications
Data and new technologies

11.45 **Bathymetry**
Barnaby Pountney, DOF Subsea
Single & Multi Beam Echo Sounders
Validation
AUV's, ROV's
Tide Correction
Side Scan Sonar

12.45 Lunch Break

13.45 **Tides & Currents**
TBC
Tide Measurement
Prediction
Current Profiling
Temp Salinity
Sound Velocity Profiling Solitons

14.30 **Hydrographic Surveys for Nautical Charting is all about quality control**
Paul Kennedy, Reach Subsea
Why is this important?
What is a quality control measure?
What are the inputs?
What are the outputs?
Managing crunch times

15.30 Course Finish

** SUT reserve the right to amend the course programme as required.

** Please note that all SUT courses are subject to minimum numbers. If minimum numbers are not met for the course to go ahead, the registration fee may be transferred to a future event or refunded in full.

REGISTRATION FORM

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

SUT Membership Number

Full name

Job title

Company

Address

Postcode

Telephone

Email

Signature

Course fees: (please tick)

Early Bird* Member	$1200 AUD	☐
Early Bird* Non-member	$1430 AUD	☐
Member	$1495 AUD	☐
Non-Member	$1780 AUD	☐
Student Member	$ 480AUD	☐

The prices above are **inclusive** *of GST*
Early Bird registrations must be received by 18th February 2025
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 wil carry a 2.75% surcharge, Visa a 1.5% surcharge.*
o Amex o Mastercard o Visa

Card number ☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐☐

Card holder's name

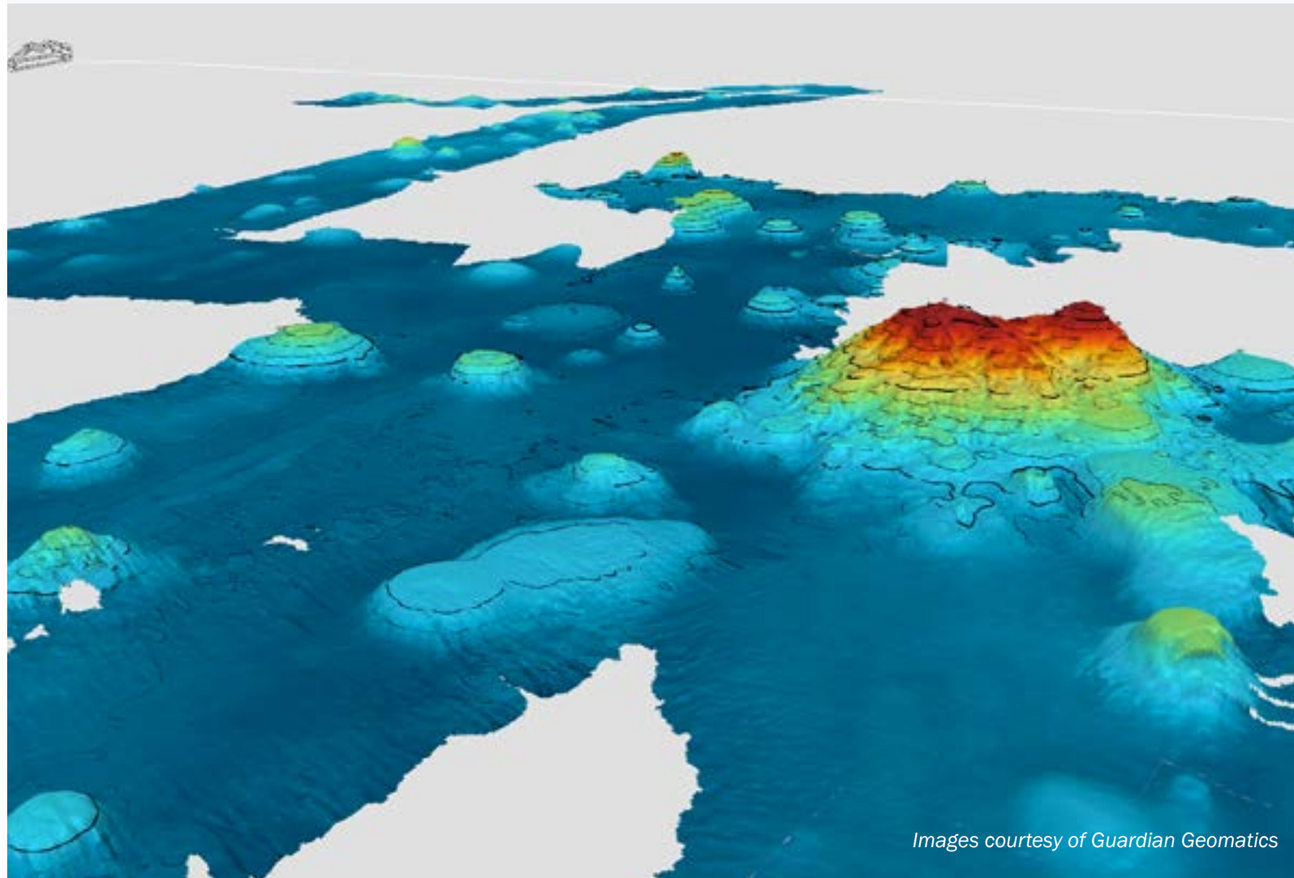
Signature Expiry date

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.



Images courtesy of Guardian Geomatics