This two-day course has been specifically designed for people new to subsea or unfamiliar with the various corrosion considerations which need to be applied during design, construction and operation of subsea assets.

The aim of this course is to provide an overview of the various materials and corrosion issues which are applicable to subsea structures. The choices made which impact one area of corrosion and integrity will often impact the choices in other areas, and also affect the long term inspection and monitoring which may be required to ensure the design life is met. Having a general overview of the interaction between the various factors and the impact that certain choices make and the equipment used in inspecting and monitoring the structures will provide attendees with a broad knowledge on the interaction which needs to be considered in any installation.

The course will be presented by experienced personnel from both the supply and subsea industries. The course will be held in a classroom environment, with the session being interactive, with every opportunity to ask questions and discuss the material presented.
PROGRAMME:

DAY ONE
Tuesday 27th March 2012
08:30 Registration and Coffee

09:00 Coffee / Tea

09:30 Introduction - Grahame Strong, WGIM
Grahame will introduce the course by providing an overview of corrosion issues affecting subsea structures and setting the scene for the presentations to follow. He will cover the basic operating conditions for equipment (both internally and externally), basic design requirements and design considerations including costs etc. He will introduce the basic mechanisms of corrosion, and discuss the effects of elevated temperatures, CO2, H2S, sand, seabed topography and choice of material etc, on the rate of corrosion. To assist with the learning experience, Grahame will also outline a series of questions that the attendee should be able to answer at the end of the 2 day course.

09:45 Corrosion and Erosion Monitoring Equipment - David Breakey, Teledyne Oil & Gas
Andrew will address the type of equipment which is available for monitoring of corrosion and erosion of subsea assets. This will include equipment such as sand monitors (acoustic and probes), LPR probes, ER probes, RPCM, CEION probes etc. Included in this presentation will be the interfaces between subsea and topside equipment and the communication options which are available.

11:00 Coffee / Tea

11:15 Corrosion & Erosion Modelling - Chris Selman, WGIM
Andrew will discuss the various models which are available to model the effects of CO2, H2S and sand production on the internals of pipelines. He will compare the models, the information required for input, and the advantages/disadvantages/limitations of each. These models are used to determine the corrosion allowance and the requirement for more exotic (corrosion resistant) pipeline materials in certain applications.

12:45 Lunch

13:30 Manufacturing of linepipe - Masahiko Hamada & Tsuyoshi Miki, Sumitomo, Japan
Sumitomo will discuss the manufacture and welding of linepipe including carbon steel and corrosion resistant alloys. The presentation will address certain types of steel and their manufacture into linepipe and the characteristics of the materials.

14:45 Coffee/Tea

15:00 Manufacturing linepipe cont.

16:00 Specification, Fabrication and Welding - Niekie Joosten, WeldNet
This presentation will cover the materials used in subsea installations and the issues related to welding them together. The types of welds, heat treatment, metallurgy of the welds, limitations imposed on welding offshore pipelines (on barges etc) and testing welds. A will also be provided to the same fabrication in an onshore environment.

17:30 Classroom Day End

18:00 Course Dinner - Venue to be advised

DAY TWO
Wednesday 28th March 2012

08:45 Coffee/Tea

09:00 Chemical Selection, Injection and Inhibition - Steven Davoren, NALCO
Steven will discuss the types of inhibitors which are available for application into oil & gas subsea production systems. Topics will include selection and qualification of inhibitors for systems utilising subsea injection via chemical umbilicals and systems utilising continuous MEG for hydrate control. Other challenges such as top of line corrosion management and downstream process impacts for using corrosion inhibitors will also be provided.

10:30 Coffee / Tea Break

10:50 Cathodic Protection and Coatings - John Grapiglia, CCE
John will cover the codes and standards which are used in the design of cathodic protection systems, the important factors which affect the performance of CP systems and a general overview on the issues related to CP and the interaction with coating systems.

12:30 Lunch

13:15 Operational Integrity and FFS - Neil Pain, Rosen
Harry will discuss pipeline pigging, codes and standards for defect assessment, types of pigs available, their benefits, the type of data which can be collected and limitations affecting intelligent pigging, and pipeline design. It will include how the data is processed and what information is available from the intelligent pigging of pipelines.

14:45 Coffee / Tea

15:05 Planning and Implementation of Inspection & Monitoring - Diedie Rick Naude, Applus Rtd
This presentation will cover the issues which affect subsea structures and the type of inspection which are performed. It will include ROV inspections, ROV types, tooling, ROV structures and the type of inspection which are performed. It will also include equipment such as sand monitors (acoustic and probes), LPR probes, ER probes, RPCM, CEION probes etc.

16:35 Wrap up.

16:45 Course End.
Registration Form
Please e-mail completed form to Perthevents@sut.org or fax to + 61 (0) 8 9446 9905

Please tick to indicate your preferred payment method: SUT Member No._____________
Credit Card _______ (Visa, MasterCard or AMEX *) Cheque _______ Invoice (PO No.) ______________

Please tick appropriate box.

Name ___________________________________________________________________________________
Company ______________________________________________________________________________
Address _________________________________________________________________________________
Phone no. ___________________ E-mail address (s) ____________________________________________

Credit Card No: VISA or MASTER CARD ONLY. __________/____________/___________/____________
Exp. _______ / _______ Security no __________ (last 3 digits on the back of your card)

Name on the card __________________________________________________________________________
Billing Address if not as above __________________________________________________________________

Amount to be charged $___________ Signature ________________________________________________

E-mail address where receipt for credit card payment should be sent _______________________________________

For further information on this event, please contact Joyce Bremner J.bremner@sut.org Tel: + 61 (8) 9446 9903
To register, please e-mail completed registration form to perthevents@sut.org or fax the completed form to + 61 (8) 9446 9905