

Advanced OrcaFlex Training

Fatigue Analysis and Vortex-Induced-Vibration (VIV) Analysis

The following is the syllabus for a 1 day OrcaFlex advanced training course which covers both of these topics. Please see www.orcina.com/Support/SoftwareTraining for most up-to-date information. Please do not hesitate to contact us for more information, or to reserve a place.

Module 1: Fatigue Analysis

- Why do fatigue analysis – basic theory
- The OrcaFlex pipe model and its application to fatigue analysis
- Cycle counting techniques
- Use and processing of wave scatter data
- Regular wave fatigue analysis
- Random sea fatigue analysis
- Spectral analysis and stress RAO's
- Modelling composite structures

Module 2: VIV Analysis

What is VIV and why do we worry about it?

a) Frequency Domain Models

- VIVA interface and segmentation issues
- Shear7 data preparation and modal analysis

b) Time Domain Models

- Milan Wake Oscillator
- Iwan and Blevins Wake Oscillator
- Vortex Tracking Models