

Introduction to the Python Interface to OrcaFlex Standard Training Course Syllabus

The course requires experience of using OrcaFlex, but no experience of Python is required. It is organised as a series of lectures and practical sessions typically held over one day (inperson) or two half-days (remote). Session 5 is a choice of two subjects depending on audience preference. If both subjects are required, additional time will need to be allowed.

The course is intended to be 'hands on' with attendees writing Python code and then applying it with pre- and post-processing of OrcaFlex analyses.

Session 1 - Introduction

Introduction to automation, the OrcaFlex API, and why we use Python with OrcaFlex

Session 2 - Post-processing

- Accessing and post-processing of results
- Comparison with OrcaFlex GUI

Session 3 - Pre-processing

- Python data access
- Building of models
- Batch processing to create load cases
- Types of load case output files
- Comparison with OrcaFlex GUI

Session 4 - Practical exercises

Putting into practice sessions 2 and 3

Session 5 – Choice of subjects depending on audience preference

- External functions
- User defined results and post-calculation actions