

□ Course Title: Petrel Property Modeling

- Training contents:

This course is intended for the user with fundamental Petrel modeling skills. The course covers basic geostatistics, data preparation, data analysis, facies and petrophysical modeling. You will learn different ways to create property models and how to condition models to existing models and secondary data. This course guides the user through concepts, algorithms and software functionalities in property modeling.

The first part of the course focuses on the usage of basic geostatistical tools, through data analysis. Also pre-modeling processes concerning well data preparation will be covered. Also here we will look into the first step of the property modeling workflow: upscale well logs to create single property values at well location for each cell. This will create hard data that will be used to populate the 3D grid with either deterministic or stochastic algorithms.

The second half of the course focuses on facies and petrophysical modeling workflows using stochastic methods as well as covering the usage of Kriging for continuous properties. Implementing Data analysis results and using secondary data to constrain the result will also be shown.

- Training schedule (summary)

Date	Program	Note
Day 1	Basics of uni and bivariate Geostatistics	
Day 2	Facies modeling	
Day 3	Petrophysical Modeling	

- Daily lesson plan

Day 1: Geostatistics

09:30~13:00: Basics of uni and bivariate Geostatistics

13:00~14:00: Lunch

14:00~17:30: Data preparation, including well log edits and calculations as well as well log upscaling for discrete and continuous data

Day 2: Facies modeling

09:30~13:00: Data analysis, Sequential Indicator Simulation, Object Facies Modeling

13:00~14:00: Lunch

14:00~17:30: Truncated Gaussian Simulation with and without trends, Using secondary data to populate facies models

Day 3: Petrophysical modeling

09:30~13:00: Data analysis, Sequential Gaussian Simulation, Gaussian Random Function Simulation

13:00~14:00: Lunch

14:00~17:30: Kriging, Using secondary data to populate petrophysical models

□ Introduction of Lecturer

- See attachment.