

Advanced Statistical Modelling & Design of Experiments with JMP®

Module 3

Suitable for: Anyone who already has some understanding of statistical methods and software who wishes to really extend their knowledge and optimize operational performance and process capability

3 Day Course

Purpose: To enable delegates to build predictive statistical models from historic data and to design experiments and data collection to get the maximum useful information with minimum disruption and effort.

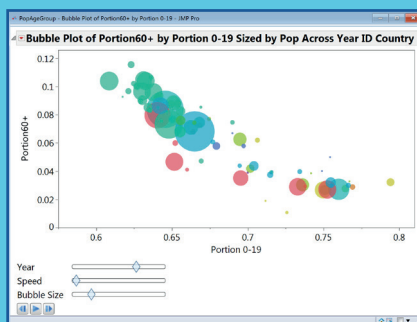
On this training delegates will learn:

- build predictive statistical models
- run statistical simulations
- understand the concepts & types of DOE
- use JMP custom design approach to generate designs
- analyse DOE results, evaluate & optimise the designs
- augment designs.

Course Content

Design of Experiments

- Concepts & types of DOE
- JMP custom design approach
- Carrying out a practical DOE
- Analysing DOE results
- Evaluating & optimising designs
- Augmenting designs
- Matching designs to the application
- DOE Implementation & planning



Modelling

- Multiple regression
- Main Effects & Interactions
- Modelling (Least Squares, Stepwise, Partitioning)
- Logistic models
- Leveraged Effects
- R Sq adjusted & residuals
- Screening

Profiling & Simulation

- Profiler
- Simulator
- Monte Carlo
- Adding Noise
- Optimisation
- Multiple Y models
- Response surfaces
- Desirability functions

Multivariate Analysis

- Pearson coefficients
- Matrix plots
- Heat maps
- Multivariate charts

Course Style

- Very hands on.
- Client specific examples, scenarios, case studies.
- Simulations to demo DOE concepts.
- Delegates need their own PC & JMP® software throughout the course.

"I have never had training that was so practical in the approach. You will get to fix your root cause problems incredibly quickly"

JAVIER, SIX SIGMA BLACK BELT