JMP Software: Design and Analysis of Experiments

This course is for engineers and scientists with some statistical training who want to design and analyze experiments available in Version 5 of JMP software.

Duration: 3.0 days

Course Description [Click to register ONLINE]

This course teaches you how to design and analyze experiments to find the vital few factors or to optimize the process response. The course emphasizes the principles of experimental design while also demonstrating screening designs and response designs. Both classical designs and newer custom approaches to design are covered.

Prerequisites

Before attending this course, it is recommended you

- complete the JMP Software: Statistical Data Exploration course or have equivalent experience
- complete the JMP Software: ANOVA and Regression course or have equivalent experience
- have some knowledge of the basic tenets of design of experiments.

Course Contents

Introduction to Design and Analysis of Experiments

- review of basic statistical concepts
- introduction to experimental design
- completely randomized designs

Multiple Factor Designs and Blocking

- randomized complete block design
- randomized incomplete block design
- full factorial designs
- the 2^k factorial design
- randomized incomplete block designs with multiple factors

Screening Designs

- full factorial screening designs
- fractional factorial designs
- blocking with screening designs

Response Surface Methodology

- concepts and terms
- classic response surface designs for second-order models
- steepest ascent method

Custom Designs

- custom design generation
- custom response surface designs