

Tailored Statistical Workshops

Workshops tailored to your
statistical training needs.

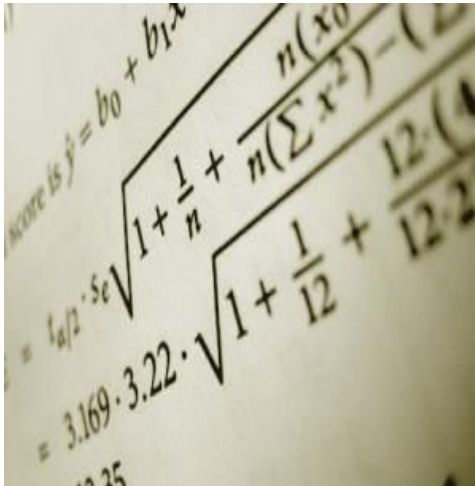
Workshop Overview & Content

“Data Analysis has no commercial value unless the
decision makers receiving it are able to act upon it.”

Steve Hulmes, Workshop Leader

Tailored Statistical Workshops

Overview



What is it?

This bespoke workshop is tailored for your own data analysts' needs. The workshop can be one day or two days in duration depending on the content needing to be covered. A list of statistical techniques that training can be offered on are given on the next page.

Who is it aimed at?

This workshop is for data analysts who's responsibility it is to employ statistical techniques during the course of job in order to provide insight and analyses. Previous attendees include marketing analysts, statistical modellers, risk analysts, operations analysts, SPC analysts and financial analysts.

Why should I attend?

These tailored workshops are very practically based and are developed and delivered by a highly experienced statistician. Not only will delegates be taken through the theory behind the techniques but they will have hands-on exercises to complete to aid the understanding of their methods and, importantly, their practical application.

When is it?

This workshop is only run as a privately hosted workshop as the content is customised to meet each client's individual requirements. Clients can select from the list of techniques listed on the next page of this document.

Previous clients include Network Rail and Lloyds Banking Group.

Who is the facilitator?

Craig Marsden, a highly experienced Statistician and Trainer, delivers the workshop and provides the necessary facilitation to help delegates absorb the learnings.

How much is it?

Fees for hosting a private tailored workshop vary depending on content and duration. Please call Sophic on 0161 976 3826 to discuss your requirements.

"A very useful course with a very engaging trainer. Excellent examples that related to our work."

Network Rail

"Excellent course"
Delegate, 2014

"Nice to have a course that is applicable straight away. Lots are theoretical but not easily applicable"

Delegate, 2014

"Great course and trainer"
Delegate, 2013

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Workshop Content

Clients can choose the elements and techniques they wish to cover in the workshop from the list below. If there is a technique that does not appear in the list please call or email and we will do our best to accommodate your requirements.

TECHNIQUES

Basic Statistics

Descriptive statistics
One-sample Z-test, one- and two-sample t-tests, paired t-test
One and two proportions tests
One- and two-sample Poisson rate tests
One and two variances tests
Correlation and covariance
Normality tests / Outlier test – Grubbs
Poisson goodness-of-fit test

Regression

Linear regression
Binary, ordinal and nominal logistic regression
Nonlinear regression
Stability studies
Orthogonal regression
Partial least squares
Poisson regression

Analysis of Variance

ANOVA
General Linear Model
MANOVA
Multiple comparisons
Response prediction and optimization
Test for equal variances
Contour surface plots
Analysis of means

Parametric and nonparametric distribution analysis

Box-Cox and Johnson transformations
Goodness-of-fit measures
ML and least squares estimates
Exact failure, right-, left-, and interval-censored data
Accelerated life testing
Regression with life data
Reliability test plans
Threshold parameter distributions
Repairable systems
Multiple failure modes
Probit analysis
Weibayes analysis



Power and Sample Size

Sample size for estimation
Sample size for tolerance intervals
One-sample Z, one- and two-sample t
Paired t
One and two proportions
One- and two-sample Poisson rates
One and two variances
Equivalence tests
One-Way ANOVA
Power curves

Multivariate Techniques

Principal components analysis
Factor analysis
Discriminant analysis
Cluster analysis
Correspondence analysis
Decision trees
Neural nets
Item analysis and Cronbach's alpha

Time Series and Forecasting

Time series plots
Trend analysis
Decomposition
Moving average
Exponential smoothing
Winters' method
Auto-, partial auto-, and cross correlation functions
ARIMA

Nonparametric

Sign test
Wilcoxon test
Mann-Whitney test
Kruskal-Wallis test
Mood's median test
Friedman test
Runs test