



DESIGN OF EXPERIMENT (DOE)

Introduction

Statisticians in industry have used DOE for more than fifty years. It is only recently that managers, engineers and scientists begin to explore these methods and find out the effectiveness in problem solving, design and development.

DOE will help to minimize the many variables that affect the yield of production in the industry. It permits many variables to be changed in a planned manner in order to come out with the most optimal values for such variable thereby saving time for production and cutting cost. It is no wonder that DOE is the most importance tools used in Six Sigma Black Belt Program.

Course Objectives

This course will enable the participants to:

- Provide means for tackling problems with long-term solutions.
- Improve quality of products through optimizing the variables.
- Reduce waste due to frequent rejects on the product resulting from quality problems.
- Increase productivity by reducing quality problems.
- Reduce the cost of production due to ability to detect quality problems faster.

Course Outlines

- Analysis and Control of Variables
 - Statistical techniques in quality improvement.
 - Variance reduction in product and process improvement.
 - From Statistical Quality Control to Design of Experiment.
 - A planning guide for more successful experiments.
- Process Evaluation and Comparison
 - Statistical techniques and decision making in the face of variability.
 - Evaluation and characterization of process variations.
 - Comparative studies of process performance.
- Multifactor Studies
 - Framework of P-optimization.
 - Application of Design of Experiment.
 - Factorial selection and coding.
 - Factorial experiment : design and analysis.
 - Two-level factorial designs.
 - Interpretation of main and interaction effects.
 - Significant tests for main and interaction effects



- Case Studies

Who Should Attend

This course is suitable for technical professionals as well as chemical professionals such as managers, engineers, engineering assistants and chemists involved in design, development, production, manufacturing, quality, and maintenance of the product.

Pre-requisite

Participants should have basic knowledge of statistics.

Award of Certificate

Certificate of successful completion will be issued to participants who have attended at least 75% of the course.

Course Dates (2 Days / 9am – 5pm)

Refer to our website.

Course Fees

S\$ 440 (For SQI Member)

S\$ 490 (For Non-Member)

GST is not applicable. Price is inclusive of two tea breaks.

(SDF funding available for SME Only – Application via www.sdf.gov.sg)

Course fees are subjected to change without prior notice.

Training Venue

Training will be conducted in SQI, 66 Tannery Lane #06-07 Sindo Building S347805

For more information, please contact:

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