

Design of Experiments (DOE)

WHY THIS COURSE: Design of Experiments is the basic step for any Six Sigma Improvement. This course in combination with 7 QC tools is an efficient and effective replacement of heavy investment on Six Sigma training. In this course, participants are trained to solve complex problems with systematic and simple designs. This course also helps to save cost through removal of un-necessary and in-effective controls.

COURSE OBJECTIVE: The purpose of this course is to create awareness on Shainin's techniques of Design of Experiment and it's application for improvement in quality and productivity. We also undertake consultancy projects on Quantum Improvement using DOE and other Problem Solving Tools. Complex and chronic problems are analyzed and solved resulting in improvements in quality indices. In house workshops are also arranged as per organizational needs.

WHO SHOULD ATTEND: Participants should be preferably diploma or degree in engineering with basic awareness of 7 QC tools and elementary mathematics. Please bring along calculator for this training program.

COURSE COVERAGE & STRUCTURE:

- ✓ Introduction
- ✓ Objective of DOE
- ✓ Benefits from DOE
- ✓ Multi-vari Analysis
- ✓ Exercise on Multi-Vari Analysis
- ✓ Paired Comparison
- ✓ Exercise on Paired Comparison
- ✓ Process Parameter Search
- ✓ Full Factorial Analysis
- ✓ Exercise on Full Factorial
- ✓ Component Search
- ✓ Exercise on Component Search
- ✓ Variable Search
- ✓ B Vs C Analysis
- ✓ Exercise on Hypothesis Testings
- ✓ ANOVA Analysis
- ✓ Elementary Taguchi Orthogonal Arrays
- ✓ Question and Answers
- ✓ Post Session Evaluation