

Last date for registration 28 November 2024

INTRODUCTION

Design of Experiments (DOE) is a mathematical approach to find the importance of the input (x) factor on some output (y) factor and Optimize the setting of x factors. Typically involved in the Lean, TQM and at the Improve stage in Six Sigma approach.

DOE is useful in Design, Sales, Production, Logistics, Human Resource and Finance departments. It will identify the most important input factor for Sales volume, Production, Recruitment, Budgeting, Revenues etc. Thus to decide the focus for the relevant input factor like advertisement, Training, Technical parameters in the machine etc.

This workshop is designed in such a way that a person without having any statistical or core mathematical background can also use DOE in the work.

FOCUS AREAS

Day 1

- Basic mathematics and statistics relevant to DOE
- Concepts of Factors, Responses & Levels.
- 2-Factor 2-Level (22) and 2k experiments
- Problem Solving with Factorial Experiments - multiple factors at two levels.
- Fractional Factorial Experiments
- Analysis of Data. Establishing Cause & Effect relationships.
- Design of Experimental runs and Measuring Results.
- Affect Plots and their interpretation.
- Concepts of Confounding & Blocking.

Day 2

- Lurking Variables, their effects and their identification.
- Introduction to Taguchi's implementation of DOE, Loss Function.
- Evaluation of Signal-to-Noise Ratios.
- Concept of Robust Design.
- Implementation of Design & noise arrays for robust design.
- Applications of DOE for Quality, Cost and Business Process Improvement. DOE in Six Sigma Projects.

KEY TAKE AWAYS

After undergoing the program, the participants will be able to have an overview of :-

- Accumulate, organize the data and analyze for identifying the key factors and take the relevant decision for better productivity
- Improve productivity and efficiency with the use of Factorial DOE
- Know the Minitab Software for working in DOE

PARTICIPATION FEE

Rs. 10450/-

+18% GST

**IMTMA Members/ Micro Companies/ Individuals/
Educational Institutions / Students/ IMTMA Non
Members/ Others**

USD 415/-

Overseas Participants

Group Concession : 10% for 3 to 5 and 20% for 6 and more delegates being nominated from the same company

PARTICIPANT PROFILE

Supervisors and above from all Manufacturing industries.

FACULTY

Er.Dhananjay M. Apte- Licentiate Engineer. 1991 batch. M.E.(Mech.), Six Sigma MBB, Pune University topper-NMCT, Rewarding 30 Years Experience in Quality, Sales, Process. Projects in Industry & Education. Delivered 24,000 + Training Hours. Published Engineering & Management Articles, Books & Papers. Creator of Task Management- mini ERP software. Recipient of Shikshan Rattan Puraskar, Best Teacher Award (Times of India -Sept. 2004). Many rewarding feedback from Industries & Institutions including appreciations from Ms.Anu Aga (Thermax) , Mr.P.P.Chhabria (Finolex) and Dr.Vasantrao Gowarikar. High impact Trainer with 500 + google reviews scoring 4.8 points out of 5.0. And also a Panelist, Interviewer, Mentor, Curriculum Advisor, Guide, Socialist & Singer.

For Registration Contact

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REGISTRATION : Prior registration for participation is necessary. Number of participants is limited and will be accepted on 'First Come First Serve' basis. A Certificate of participation will be issued to participants.

Important Information : Participation fee includes, course material, working lunch and tea / coffee. Interested companies are requested to register online by clicking on 'REGISTER' button and by filling up the nomination authority and participant's details in specified form.