

Design of Experiments, Advanced DOE

Online Courses in DOE



MiC Quality offers two courses in experimental design: the basic **Design of Experiments** course and the **Advanced DOE** course.

The basic DOE course concentrates on full and fractional **factorial designs**. You will learn how to design and conduct the experiments and how to analyze the results correctly. You will also learn how to use the popular Minitab software; if you do not have Minitab you can download a free evaluation copy from Minitab.

The Advanced DOE course covers the **Taguchi** approach, Response Surface Designs, Hill Climbing and Mixture Designs.

Both courses are **practical**. They include **interactive** simulations of typical processes, and case studies to make sure that you are confident in actually applying experimental design to improve your processes. We provide **unlimited email support** to answer your questions and discuss how you can best use experimental design in practice.

Main Topics for the Basic DOE Course

- :: full and fractional factorial designs
- :: foldover designs
- :: screening designs, Plackett-Burman Designs
- :: hypothesis testing, t-test and F tests
- :: single factor experiments and ANOVA
- :: residual analysis and normal probability plots
- :: analyzing designs and transforms

Main Topics for the Advanced DOE Course

- :: Taguchi Signal to Noise Ratio
- :: Taguchi approach to experimental design
- :: Response Surface Designs (Central Composite and Box-Behnken)
- :: Hill Climbing strategies
- :: Mixture Designs

Features

- :: **interactive** with simulations of real processes to give you hands-on experience
- :: **practical** with many exercises and case studies
- :: **comprehensive** each course has about 30 hours of in-depth learning over a period of up to 6 weeks
- :: **flexible** with self-paced study and access from anywhere at any time
- :: **email support** to clarify any issues, answer any questions, and review case studies
- :: **excellent** support for **Six Sigma Black Belt** training

Our Students Say



April Baugher
Process Development Engineer
Applied Biosystems, US

"I've found that your course provides the same information given in the Montgomery texts, but your course supplies it in a palatable manner in which I can understand the applications. I've found myself glazing over looking at the SPC and DOE texts, which can read like a mathematics proof. Your course bridges that gap for me."



Glen Netherwood
MiC Quality

Who Should Enroll

- :: Quality Managers
- :: Engineers
- :: Quality Chemists and Scientists
- :: ASQ SSBB and CQE Aspirants
- :: Six Sigma Green Belts
- :: Black Belts and Master Black Belts

Certification

- :: **certificate of completion** if you work through over 80% of the course material
- :: **3 Recertification Units (RUs)** for your ASQ certification renewal (each course)

ASQ Certification

Our **Design of Experiments** courses will help to prepare you for the Design of Experiment topics in the Body of Knowledge for the **Certified Quality Engineer (CQE)** and the **Six Sigma Black Belt (SSBB)**

Course Requirements

- :: basic DOE course is an **essential prerequisite** for the Advanced DOE course
- :: PC or Mac running a recent browser
- :: Microsoft Excel 97 or higher
- :: **optional** - Minitab (free evaluation copy is available from www.minitab.com)

VISIT :: www.micquality.com ::

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