

# EduPack Design of Experiements (DOE)

Get it right from the start using MODDE®

Simplifying Progress

SVISCIS

### Build KnowledgeThrough Experiments



Design of Experiments (DOE) is a systematic method for planning experiments. DOE provides you with a plan for your experiments and tools for analyzing your results. Based on the outcome of experiments, you will get a mathematical model to understand and optimize your system of study.

The operating conditions in your system can further be assessed by Quality by Design principles (QbD) that allows you to find a safe operating condition, where all of your requirements are met. The DOE method helps you keeping the number of experiments low while getting the information you need to understand the system.

### Create data to understand

In situations when you don't have data to analyze, you need to create data to understand the system. When there are several variables effecting your final result, DOE provides a method to determine cause and affect relations between input variables and final output. With the right interpretation of these data you can extract in-depth information and understand the system you are studying.

### DOE EduPack & MVDA EduPack

We provide EduPack with two complementary methodologies for gaining knowledge from data, Design of Experiments (DOE) and Multivariate data analysis (MVDA). DOE provides experimental series that reveals cause and effect relations between input variables and process output. MVDA can be used to extract information from big data sets with historical data.



"Build knowledge and understanding the smart way - to learn the most from your data"

## Education to Get Experiments Right from the Start

The education package will take students on a journey to discover, how DOE and QbD can be applied to solve problems and bring new insights to their field of application.

With EduPack students get the best education in DOE for generating good results.

## DOE EduPack is designed to give students hands-on skills to solve problems and learn:

- How to create efficient experimental designs to match the objectives
- How to analyze data based on sound statistical principals to evaluate results of the experiments
- How to interpret results by using graphical and statistical tools
- How to convert modeling results into concrete action with MODDE® optimizer & verifying experiments
- How to define a design space and find Robust Set Point

#### Get Started with DOE

The DOE EduPack will help you get started with all the educational material you need for

lectures and hands-on training. Slides for classroom teaching are supported with 12 recorded lectures that will cover theory and examples. The slides are structured, so theory and exercises go together.

#### DOE EduPack includes:

- Complete slide deck for classroom teaching
- 12 recorded lectures
- Exercises with relevant examples from industry
- Software: MODDE® Pro Design of Experiments Solution including one license with 20 activations valid for three years



### Sartorius Data Analytics – Change a Little. Grow a Lot.

Sartorius Data Analytics are leading data analytics experts with multiple applications in high-tech industries worldwide. We enable customers at both the individual and enterprise levels to maximize the value of their data, enabling better decision-making and process excellence. Through our complete solutions in the Umetrics® Suite of Data Analytics Solutions, which include state of the art software, academy training and education, consulting, and OEM services, we help our customers to grow their businesses by maximizing profitability and minimizing time to market.

To learn more about how Sartorius Data Analytics helps you grow your business please visit www.sartorius.com/umetrics and follow us on LinkedIn.



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