THE SCHOOL of Technology & Innovation



Global Knowledge Regional Experience

Process Development Engineering

Develop World-Class Capacity in R&D Competency



Companies have different competition strategies based on selected quality dimensions of products they are offering.

Among many, "reliability" is increasing becoming more important in the field. There is an obvious fact that companies offering relatively more reliable solutions are increasing their share in the market. In this regard, both design and production quality contribute to reliability, while "robustness" is used as a measure of performance.

Developed and first used in Japan, and later in the rest of the world-class companies, "robust design" is a very comparative engineering approach used in technology, product and process development.

In this training, robust process development is studied by following a step-by-step engineering methodology. In the program, there are workshop exercises as well to give participants a chance to gain hands-on experience in robustness development.

KEY BENEFITS

The program helps participants to gain hands-on experience in developing world-class, robust (highly reliable) technologies, products, and processes. They will learn how and why "Made in Japan" products were ultimate winners in market for a long period of time. The participants will improve skills in the following key areas:

- Developing product/process strategy
- Identifying quality loss function
- Finding failure modes and priorities
- Developing system concept/model
- Developing robust model and parametric diagram
- Selecting orthogonal arrays and planning experiments
- Conducting tests and data collection
- Optimization and verification of design
- Quality gain calculations



WHO SHOULD ATTEND

"Process Dev. Engineering" is for technical people, who are planning to develop high quality processes. It's specifically designed for:

Product, process, and field engineers at all levels (including C-levels) of product and process design firms and manufacturing companies.

SCHEDULE (40 HOURS)

Day 1

- Competition Strategy
- Quality Loss Function

Day 2

- Define project scope/ objectives.
- Identify ideal function/ response to be measured.

Day 3

- Develop signal and noise factor strategies.
- Establish control factors and levels.

Day 4

- Conduct Experiments.
- Conduct data analysis.

Day 5

- Conduct confirmation run.
- Implement and document results.

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ABOUT THE SCHOOL

The School is an international research, training, and consultancy company, dedicated to provide guidance to technology development engineering and innovation engineering projects towards creating quantified value-propositions for all stakeholders, thereby, achieving competitive and sustainable business solutions.

ABOUT THE EXPERT (Dr. SUAT GENÇ)

Dr. Suat Genç is the founder and CEO of the School, who have more than 25 years of experience in the field of technology and innovation as a researcher, faculty member, engineer, consultant, and C-Level executive.

Dr. Genç is also currently a part-time adjust professor at Boğaziçi University and Board Member at Gebze Technical University Technopark in Turkey.

Up until recently, Dr. Genç served for 4 years as General Manager of BMC Power Company, developing Power-Packs (Engine, Transmission and Cooling Systems) for both military and commercial vehicles (e.g., Altay Main Battle Tank and Armored Vehicles).

Prior to these appointments, Dr. Genç was Vice President for 8 years at MAM and BİLGEM Research Centers of the Scientific and Technological Research Council of Turkey (TUBITAK). His responsibilities were methodology development for Strategy and Technology Management as well as developing new business models to transfer available technologies to industrial companies.

Dr. Genç served for 7 years as Product Development Coordinator at Turkish Institute for Industrial Management (TUSSIDE/TUBITAK), where he found the opportunity to provide professional R&D training and certification programs as well as consultation services to more than 500 companies.

Dr. Genç also worked for 5 years as a Senior Systems Development Engineer for Plug Power Fuel Cell Company (General Electric Global Research Center) in New York, where he was responsible for a wide range of technology and system development activities.

Dr. Genç received his BS degree in Mechanical Engineering from Istanbul Technical University (Istanbul, Turkey), and his MS and PhD degrees in Mechanical Engineering from Rensselaer Polytechnic Institute (New York, USA).

THE SCHOOL DIFFERENCE

The programs have been tailored by utilizing global theories and knowledge, but further enriched and enhanced by taking into account regional facts such as cultural differences, market realities, working people skills as well as management styles.

After all these adjustment and improvements, The School is ready to support regional organizations by providing step-by-step, easy-to-understand, and ease-to-implement premium process knowledge; primarily in "Technology" and "Innovation."

OUR PROFESSIONAL PILLARS

The School is dedicated to provide services in below core areas:



To make things **Work**Technology Development Engineering

To **Meet** users' needs

Product Development Engineering

To have robust **Performance**Process Development Engineering

To make an Innovative Idea **Viable**Design Thinking for Innovation

To **Launch** an Innovative Product Innovation Engineering

To **Sustain** an Innovative Company

NSF I-Corps Bootcamp

