



Eshan College of Engineering

Approved by AICTE, New Delhi and Affiliated to AKTU (Formerly UPTU) & BTE, Lucknow

Detailed Report

Seminar on- "Taguchi Methodology & Its Application in Research Methodology" (Two-days)

Subject Area- Research Methodology

Organized by- Faculty, ECE

The Taguchi method of quality control is an approach to engineering that emphasizes the roles of research and development and product design and development in reducing the occurrence of defects and failures in manufactured goods. The Taguchi method gauges quality as a calculation of loss to society associated with a product. It optimizes design parameters to minimize variation before optimizing design to hit mean target values for output parameters and uses special orthogonal arrays to study all the design factors with minimum of experiments. Hence, it is very vital for students to gain complete knowledge of this method for professionalism. Department of Electrical Engineering gave this opportunity by organizing a seminar on **"Taguchi Methodology & Its Application in Research Methodology"** from 10/10/2017 to 11/10/2017.

There are three components of Taguchi methods that must work in concert to achieve higher product quality. Product managers and engineers should become familiar with-

- The Taguchi loss function
- Experimental designs that account for external influences
- Achieving product quality through off-line processes.





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So, it is very necessary for students to understand its application in greater depth. This was the mission of inaugurating a two-day session on Taguchi method. There were 34 participants who joined the seminar. First day began with fundamentals of classical statistical methods and Taguchi methods, design of experiments focussing on Taguchi method and its application conveyed by speaker Dr. S.K. Gautam, AP, ASH. The eight points to this method, properties of orthogonal arrays, matrix experiment and S/N ratio were discussed in detail by Prof. Manish Kumar, AP, ASH. Final quiz on Taguchi method was the key highlight where students performed exceedingly well.

