This course provides quality analysis skills to systematically improve new products and services as well as continuously improve existing key design business processes. It is built around design business process improvement and product and service optimization and robustness. It is offered in person and can be presented at a location of your choice or in Ann Arbor, Michigan.

**PROGRAM MODULES**

1. Course Introduction/Six Sigma Overview
2. Six Sigma for Design Methodologies
3. Project Selection, Scoping and Project Charters
4. Voice of the Customer Analysis
5. Quality Function Deployment—Requirements Flow Down
6. Design Concept Selection (Pugh Analysis)
7. Design FMEA Analysis
8. Design Scorecards and Target Values
9. Mapping Techniques
10. Current State Analysis
11. Current State Metrics
12. Measurement System Analysis
13. Qualitative Process Analysis (P-Diagram)
14. Check Sheets, Pareto Analysis, and Stratification
15. Scatter plots, Regression, and Correlation
16. Introduction to Design Robustness and Experimentation
17. Single Factor Experiments
18. Two Factor Experiments/Interactions
19. Parameter Design and flik DOE
20. Tolerance Concepts and Allocation Methods
21. Tolerance Stack-Up Analysis and Simulation
22. Improvement Strategies
23. Design Mistake Proofing
24. Design Verification and Validation Analysis
25. Control Strategies
26. DFSS Project Case Study Examples

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