Fundamentals of Quality Improvement

This course will provide you with an overview of quality performance and quality improvement based on Six Sigma and Lean, by presenting the components of this very popular approach to improve organizational operations. The course starts with determining organizational quality goals in the defining phase. It continues to set the baseline for the organization through gathering, describing, summarizing, and analyzing data in the measurement phase. Then covers designing process improvements and associated control measures. The final phase covers the implementation and validation of solution/ modification measures. Various class exercises provide participants an opportunity to explore the concepts covered in the class.

Course Topics
- Quality performance and quality improvement of processes based on Six Sigma and Lean principles
- The DMAIC Process (Define, Measure, Analyze, Improve, Control)
- Review/utilize common descriptive statistical techniques
- Explore various popular quality tools including control charts for statistical process control (SPC)

Learning Objectives
- Clearly identify the problem statement through customer interaction and chartering
- Define the objective of the quality performance/quality improvement project
- Plan the project in terms of time, budget and resource requirements
- Define team structure for the project and establish roles and responsibilities
- Gather information on the current process (creating a detailed process map, gathering baseline data and summarizing and analyzing the data)
- Understand the steps of implement and validation of the preferred solution, and produce a control plan to document and hold the gains, and assist in implementing controls and monitoring systems

Related Courses
- Advanced Fundamentals of Quality Improvement
- Project Management Certificate Preparation