

New Course Offering in Spring 2023

IE59000-EP2 Design for Lean Six Sigma Black Belt

Instructor: Dr. Ben Fong

Course Description

This course will provide the comprehensive knowledge of Design of Lean Six Sigma (DFLSS) - Black Belt methodologies and tools. We will cover the structured DMAIC methodology to improve any existing process and product variations. Lean Manufacturing will be included for the elimination of wastes. The Design for Six Sigma (DFSS) methodology is introduced for new product development, along with Nonparametric Statistics for healthcare applications. Lastly, the concept of System Reliability Analysis will be addressed.

Why should I take this course? This course should cover all the main topics to reflect the ASQ (American Society for Quality) Six Sigma Black Belt Body of Knowledge. Upon the completion of this course, one should gain the necessary knowledge and may be eligible to prepare for the ASQ-Six Sigma Black Belt certification examination. This course will prepare one to become an effective Continuous Improvement/Operational Excellence change agent for business transformation across the enterprise. Moreover, the additional coverage of DFSS and System Reliability Analysis will enrich the technical skills for new product development life cycle.

Dr. Ben Fong is currently the Associate Professor of Practice at Purdue University. Prior to that, he was a senior global product portfolio manager with 28 years of diverse experience in R&D, product strategy, operational excellence, and commercial growth. He reported directly to the VP of Global Product Management and was responsible for a variety of products P&L that worth USD\$500M. Proven experience with global cross-functional leadership skills in delivering new IoT product initiatives, smart control analytics, and coaching team into operational excellence. Ben built strong customer relationships with sales and distribution/dealer executives to study worldwide market needs and develop growth strategies for product portfolio. He managed Product Management and Technology Team to define agile design criteria for NPI and market launch. Ben had coached and led various global teams that included C-level executive, product R&D engineering, operations, quality, finance, sales, marketing, aftermarket, services, and supply chain logistics.

Ben was a former DFSS Master Black Belt at GE Healthcare, a Global Product Support Portfolio Manager at Caterpillar, and a Consulting Manager at Celerant Consulting. He worked over 20 industrial sectors from 70+ U.S. and global facilities. Ben had achieved \$100M+ in savings by deploying multiple enterprise CI programs from various Fortune 500 companies.