TMAC
TEXAS A&M ENGINEERING EXTENSION SERVICE

LEAN SIX SIGMA
BLACK BELT
CERTIFICATION

LEAN + SIX SIGMA
Two Powerful Initiatives, One Integrated Program

Dramatically improve cost, quality, and delivery by combining the strengths of two powerful business process improvement initiatives through the systematic approach of the TMAC Lean Six Sigma (LSS) program.

Integrated into the Define, Measure, Analyze, Improve, Control (DMAIC) project management structure, Lean + Six Sigma results are impactful, robust, and sustainable.

Expect to be immersed in a hybrid learning environment of instruction, group exercises, hands-on simulations, teach-backs, project presentations and review of industry case studies. Experienced instructors emphasize practical application of tools and share lessons learned from hundreds of completed projects.

Learning doesn't stop once training is over.

Participants can access TMAC LSS Master Black Belts before, during and after training for coaching to rapidly apply what they learn.

Engage with more than 35 LSS tools.
See back for full list

Earn your LSS BB certification.

Complete the course. Apply what you've learned on a project according to the TMAC certification guidelines. Become certified.

TMAC Black Belts experience a median financial impact of $150,000 per year.

$9,990
per participant
(group discounts available)

Main Topics	Module
Lean Process Flow	5S Workplace Organization
	ABC Stratification
	Analytical Batch Sizing
	Kaizen Rapid Improvement Events
	Mistake Proofing
	Process Constraint Analysis
	Process Flow and Balancing Improvement
	Pull Systems and Kanbans (Generic and Replenishment)
	Rolled Throughput Yield
	Setup Reduction (SMED)
	Stocking Strategy
	The Value of Speed
	Total Productive Maintenance (TPM)
	Value Stream Mapping (Single and Multi-plant)
	Visual Process Control Tools
	Work Simplification
Project and Team Tools	Evaluating Alternative Solutions (AHP, Pugh Matrix)
	Failure Modes and Effects Analysis (FMEA)
	Piloting the Solution
	Process Control and Implementation Plans
	Project Charters
	Project Planning & Management
	Root Cause Tools (Fishbone, Pareto, C&E Matrix)
	Solution Generation and Selection
	Team Facilitation & Brainstorming Methods
	Voice of Customer (VOC) Analysis
Statistical Analysis	Analysis of Variance (ANOVA -One and Two way)
	Basic Statistics, Variation and Graphical Analysis
	Control Charts (Variable and Attribute)
	Data Collection and Sampling Strategies
	Dealing with Non-Normally Distributed Data
	Design of Experiments (Planning, Design & Analysis)
	Hypothesis Testing (Continuous and Discrete)
	Process Capability (Continuous and Attribute)
	Regression (Simple and Multiple)
	Statistical Process Control (SPC)

INCLUDED

Multiple LSS References: Guide books, Pocket Toolbooks and Binders of the weekly slides

Access to TMAC LSS Master Black Belts before, during and after training for:

- Project chartering
- Project coaching
- Tool selection and interpretation of results
- Review of project documentation for certification

REQUIRED

Laptop computer with MS Excel

Course requires participants to have Minitab loaded on their laptop with an active license.

Participants should come to the event with a defined problem description that is impacting the business. Instructors will assist participants in completing a project charter.

TO REGISTER VISIT: **teex.org/class/MAP022/**

TMAC

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