



Six Sigma for Black Belts

Six Sigma is not a slogan, a program, a toolkit, or even a method. It is quite simply a change in approach, in culture, in the way we do business. Its aim is breakthrough and the corresponding ROI and nothing less. But the ball does not carry itself over the goal line. The carrier needs skill, determination, and preparation. This is the profile of the “**Black Belt**.” Leading project teams to performance breakthrough is the crucial role of the Black Belt and the key element of success in Six Sigma initiatives. This series of five intensive, multi-day training sessions prepares the participant to achieve the same breakthroughs in performance that have been captured by GE, Motorola, Bank of America, and other leading Six Sigma proponents. However, this program is not just classroom training: *it is on-the-job performance improvement* for the Black Belt and the sending organization.

Prior to enrollment in the program the Black Belt candidate is assigned a significant Six Sigma project by his or her management. Typical Black Belt projects aim at strategic issues plaguing the organization with annual returns of \$150,000 to \$1 million, if not more. Between each training session, the Black Belt candidate returns to the workplace to apply the methodology to project tasks. The program leader provides each participant with regular on-site coaching in strategic selection and effective application of appropriate Six Sigma tools to the task at hand. Project progress reports are presented during each training session, providing cross-fertilization of learning among the Black Belt candidates. Project closure is expected within ten weeks of the final week of training. A completed project is a requirement for Black Belt certification.

Ever wondered if your training dollars paid off? You won't with this program.

Program Elements

Phase #1: *DEFINE & MEASURE*

- Six Sigma Initiative: An Overview
- Project Selection, Definition & Roles
- Team Development & Leadership
- Establishing the Process Baseline
- Measurement Systems Analysis
- Transactional Six Sigma Projects
- Planning for the *ANALYZE* Phase

Phase #2: *ANALYZE*

- Planning for the *Analyze* Phase
- Analysis of Performance Study Data
- Multi-factor Graphical Methods
- Comparative Methods
- Correlation & Regression Analysis
- Multi-factor Analysis of Variance
- Identifying Process Risk: (FMEA)

Phase #3: *IMPROVE*

- The Improvement Cycle
- Design of Multi-factor Experiments
- Response Surface Methodology
- Multi-response Optimization
- Multiple Linear Regression
- DOE for Transactional Processes
- Process Modeling via Simulation

Phase #4: *CONTROL*

- The Control Cycle: Plans & Tools
- Statistical Process Monitoring
- Mistake-proofing
- Process Documentation
- Transactional & Manuf. Electives
- Design for Six Sigma
- Project Closure & Transfer

Who Should Attend & Prerequisites

Potential candidates include business leaders, program managers, project leaders, engineers, quality analysts, process experts, and others responsible for leading and completing substantial performance improvement projects. Black Belts should be technically competent, self-starters, possessing interpersonal skills for work in a team environment, with demonstrated capabilities in general analytical problem-solving and project management. Otherwise, there are no prerequisites for Six Sigma Black Belt training. An understanding of basic statistics is helpful, although not required.

Program Provisions

- ❑ All course materials, Six Sigma reference texts, handouts, and project templates.
- ❑ Use of PC's during training sessions. (Participants do NOT have to bring a laptop PC.)
- ❑ Assistance with project selection. Personal on-site application coaching during and after the Black Belt training period to ensure project success.
- ❑ Refreshments and lunches during training sessions.
- ❑ Preparation for Black Belt certification subsequent to training and project completion.
- ❑ Two registrations in the "*Six Sigma for Leaders & Champions*" workshop to be held in the Portland, Oregon metro area, August 14th.

Program Leader: *Donald K. Lewis, Ph.D.*

Don Lewis is Principal, Lewis Consulting LLC, whose mission is to enable clients to improve their competitive performance through effective application of proven quantitative decision-making methodologies. In the role of a Master Black Belt, he has trained numerous "waves" of Six Sigma Black and Green Belts, and consulted on hundreds of manufacturing and transactional Six Sigma performance improvement projects. In the last three years Lewis Consulting's Northwest clients have captured over \$16 million in cumulative project savings through their Six Sigma project work. Since establishing his consulting practice in 1986, Don has trained and mentored over five thousand technical professionals to apply quantitative methods in their project work. In the last three years Don has trained over two hundred Black Belt candidates in the U.S., Europe, and Asia as a Lead Instructor in Motorola University's Digital Six Sigma Black Belt training program. He is an Adjunct Professor in the Department of Management of Science & Technology at the OGI School of Science & Engineering in Portland, Oregon as well as the Atkinson Graduate School of Management at Willamette University in Salem, Oregon. He received his B.A. in mathematics from Claremont McKenna College and Ph.D. in biostatistics from the University of North Carolina at Chapel Hill. Don is an ASQ Certified Six Sigma Black Belt.

Training Site & Schedule

Portland, Oregon

Phase #1: September 11-15

Phase #2: October 9-13

Phase #3: November 6-10

Phase #4: December 11-15

Class hours are 8:30 – 5:00 each day, except on Fridays when class ends in the mid-afternoon. Slight changes in the schedule are possible once the program has commenced.

Registration Fee & Information

Registration Fee: \$9,000.

(Discounts are offered for three or more registrants from the same organization.)

To register or for additional information about the course:

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