

Master Black Belt Program Summary

Program Overview

MoreSteam.com has partnered with the Fisher College of Business at The Ohio State University (OSU) to present an innovative Master Black Belt development program, employing a Blended Learning model that incorporates world-class instruction delivered in the classroom and online.



The program is designed for experienced Lean Six Sigma Black Belts who are prepared to advance their mastery of the technical and leadership subjects that comprise the Master Black Belt body of knowledge and practice.

Training consists of two weeks of classroom instruction on the Ohio State campus integrated with 72 hours of online learning from MoreSteam.com. The faculty is provided by OSU's Fisher College of Business, MoreSteam.com, and Minitab, Inc. Classroom weeks are scheduled on a quarterly basis, and you may start in any sequence. The price is \$10,000, which includes the certification process.

The curriculum covers: Design for Lean Six Sigma, Generating Creative Solutions, Fundamentals of Project Management, Advanced Statistical Tools, Advanced Lean Methods, Process Modeling, Leadership and Coaching, and Financial Analysis.

Once you have completed the coursework and developed enough experience, you are eligible for the certification process, which includes a project portfolio review, experience in coaching/mentoring, a presentation or publication in an external venue, a passing score on the exam (80%), and an oral interview.

Benefits of This Program

- **A balanced, relevant and rigorous curriculum.** This MBB program covers the skills you'll need to succeed: leadership, coaching, advanced statistics, finance, and more. It also includes advanced Lean and process modeling, two vital topics areas not covered by other MBB programs.
- **A flexible blended model.** With Blended Learning, the student controls the pace. You can start any online course at any time, and you attend the classroom weeks in any order.
- **Highly qualified instructors.** The program faculty, from OSU, MoreSteam and Minitab, Inc. (listed below), represents decades of professional Lean Six Sigma experience and affiliation with an internationally recognized university.
- **The right price.** The cost of MBB certification varies widely, as does the quality of the program. Our blended curriculum delivers deep content at an affordable price. There are no extra fees for certification or exams.

Pre-requisites

Participation is limited to Certified Black Belts. This is a rigorous Master Black Belt program, assuming mastery of the full Black Belt body of knowledge as a foundation.

To enroll, you must present Black Belt certification from a reputable source. Many third-party Black Belt (BB) training providers and certification programs do not cover the full BB body of knowledge (BOK), as we apply it. Please review the BB BOK to identify and resolve any gaps prior to starting the program. You can find the BOK on the Center for Operational Excellence Web site:

<http://fisher.osu.edu/centers/coe/lean-six-sigma-black-belt-certification-standards/>

Curriculum

The Master Black Belt program blended curriculum balances those skills required by all successful MBBs: leadership, coaching, technical knowledge, financial acumen and project management.

- **Design for Lean Six Sigma**
Includes advanced DOE (RSM, Minimum Runs for Robustness)
- **Fundamentals of Project Management**
Aligned with PMI PMBOK
- **Advanced Statistics**
Advanced Regression, Non-parametric Methods, Advanced DOE
- **Advanced Lean Methods**
Establishing Internal and External Pull Systems, Queuing Theory
- **Process Modeling**
Discrete Event Simulation, Monte Carlo, Optimization
- **Leadership and Coaching**
Leading Teams, Leading Change, Effective Coaching
- **Financial Analysis**
Financial Statement Fundamentals, Return Models, Valuation of Benefits

Virtual Topic	Details	Duration
Design for Lean Six Sigma	Process Modeling Intro, Monte Carlo Analysis, Advanced DOE, RSM, Robustness, Design of Lean Systems	48 Hours
Generating Creative Solutions	Ideation tools - TRIZ	4 Hours
Fundamentals of Project Management	Aligned with PMI's PMBOK	16 Hours
Advanced Statistical Tools	EWMA, CUSUM Control charts, Review of Non-parametric Statistics, Logistic Regression	4 Hours
TOTAL HOURS		72 Hours
Classroom Topic	Details	Duration
Advanced Stats & Leadership Week		
Advanced Statistics	GLM, Binary Logistic Regression, Time Series Tools, Advanced Anova, Non-Parametric Analysis, MANOVA, Advanced DOE, Data Problems	24 Hours
Leadership and Coaching	Leading Teams, Leading Change, Effective Coaching	16 Hours
Advanced Lean & Finance Week		
Advanced Lean Tools	Establishing Internal and External Pull Systems, Queuing Theory	16 Hours
Process Modeling	Discrete Event Simulation, Monte Carlo Simulation, Optimization	16 Hours
Financial Analysis	Understanding a P&L, ROI, Soft Benefits, Lean Accounting	8 Hours
TOTAL HOURS		80 Hours

The Certification Process



The certification process follows the completion of the four weeks of coursework. To be eligible for the certification process, you must meet the following criteria:

- Certification as a Black Belt from a reputable source
- Five years of process improvement experience, including three years as a Black Belt
- Completion of the Master Black Belt training

After you are eligible for certification, you will receive certification upon satisfactory review of the following:

- Your portfolio of project work, which must include at least 5 projects
- Evidence of coaching/mentoring experience on 10 projects
- Presentation or publication in an external venue, either in person (such as a conference presentation), or a written work (such as iSixSigma Magazine or the like)
- Passing score on the Master Black Belt exam (80%)
- Oral interview

Enrollment

The price for this four-week blended program is \$10,000, which includes the certification candidate evaluation process.

Note that, while there are other credible MBB training programs, most cost twice the price of MoreSteam's program and require four weeks of classroom time. Not only is MoreSteam's program more affordable, it allows you far greater flexibility and control over the pace and order of your studies.

The enrollment fee covers all costs for courses and materials, although program participants must have access to a laptop loaded with Minitab 16.

You can enroll at any time by contacting Amy Clevenger or Trish Ryckman at MoreSteam.com.

Phone: 614-310-1080

Email: aclevenger@moresteam.com or tryckman@moresteam.com

Schedule

Students are responsible for completing two weeks in the classroom and 72 hours of online learning.

Classroom Schedule

Advanced Stats & Leadership Week

Advanced Lean & Finance Week

Location: Fawcett Center - The Ohio State University
(<http://www.fawcettcenter.com/>)

2400 Olentangy River Rd., Columbus, Ohio 43210,
Phone: 614-292-1342



Current schedule: See our online schedule for the latest dates. These weeks can be taken in any order. (<http://www.moresteam.com/master-black-belt.cfm>)

Online Coursework

Course 1: Design for Lean Six Sigma

Course 2: Fundamentals of Project Management

Course 3: Advanced Statistics

Course 4: Ideation/TRIZ (pre-recorded or live Webinars)

Faculty



DR. ANIL MAKHIJA

David A. Rismiller Professor in Finance
Professor of Finance



Professor Makhija maintains research and teaching interests in the fields of corporate finance and public utilities. He has focused on issues related to capital structure and investment policy and has examined them in the context of privatization in Eastern Europe.

His work has appeared in academic journals including the *Journal of Finance*, *Journal of Financial Economics*, *Journal of Corporate Finance*, *Journal of Banking and Finance*, *Journal of Economic Behavior and Organization* and *Land Economics*. He is co-editor of *Advances in Financial Economics*, associate editor of *Financial Review* and serves on the editorial board of the *Journal of Applied Business Research*.

He received Fisher College's 2000 Pace Setters Graduate Teaching and other MBA teaching awards. While at the Katz School of Business, his numerous teaching distinctions included the 1995 Teacher Par Excellence Award from the management program for executives, the Distinguished Teacher Award from the 1994 Executive MBA class and the 1993 Chancellor's Distinguished Teaching Award, the university's highest award.



ROY LEWICKI

Abramowitz Memorial Professorship; Professor of Management & Human Resources
The Ohio State University Fisher College of Business



Professor Lewicki is a leading scholar in the study of trust development, negotiation and conflict management processes. He is the author or editor of over 32 books, including the leading academic textbooks on negotiation. His most recent book is *Mastering Business Negotiations* with Alex Hiam. Another recent book, *Making Sense of Intractable Environmental Conflicts*, won the Best Book Award from the International Association of Conflict Management.

Companies such as Nestle, DTE, Sterling Commerce, Limited Stores, American Electronic Power, Siemens, The Richard M. Ross Heart Hospital and The Ohio State Medical Center have utilized Lewicki's executive education services on conflict management, negotiation skills and leadership development.

Lewicki is founding editor of *Academy of Management Learning and Education* and has served as associate editor of the *Academy of Management Executive*. He received the Fisher College Pace Setters Service Award in 2001, the Westerbeck Teaching Award in 2007 and 1998, and was designated the Distinguished Connelly Scholar by the Leavey Graduate School of Business at Georgetown University in 1996. He was recently elected a Fellow of the Academy of Management. At Fisher, he teaches courses in Negotiation, Advanced Negotiation and Leadership, Values and Decision Making.



JEFFREY D. FORD

Professor of Management & Human Resources
The Ohio State University Fisher College of Business



Professor Ford's research and teaching focuses on personal leadership effectiveness, particularly in leading and managing change.

The award winning author of *The Four Conversations: Daily Communication that Gets Results*, and *Deadline Busting: How to be a Star Performer in Your Organizations*, his research has been published in the *Academy of Management Journal*, *Academy of Management Review*, *Journal of Applied Behavioral Science*, *Journal of Organizational Change Management*, *Harvard Business Review* and *Organizational Dynamics*. He was elected as a charter member in the Academy of Management Journal's Hall of Fame.

Dr. Ford is a frequent speaker and trainer to organizations and business and teaches graduate and executive-level courses on personal leadership effectiveness and leading and managing change.



PRAKASH MULCHANDANI

Senior Lecturer, Accounting and MIS
The Ohio State University Fisher College of Business



With over 30 years of experience in industry, Mr. Mulchandani brings extensive knowledge towards teaching in the business curriculum. Joining Rockwell International soon after obtaining his MBA, Mr. Mulchandani had assignments in several functional areas of the company, including Finance, Accounting, Materials/Logistics and Manufacturing. After three years as a Division General Manager, he was named President of the Commercial Vehicle Systems Business (\$3.5 billion in Revenue), from which he retired in December 2000.

In Spring 2001, Mr. Mulchandani entered the Masters of Accounting (MAcc) program at The Ohio State University, which he completed in June 2002. During this period at Ohio State, Mr. Mulchandani also taught financial accounting, management accounting and an MBA elective (Implementing Corporate Strategy) at the Fisher. He continues to teach these subjects, along with Advanced Managerial Accounting in the MBA/MAcc programs, as part of his responsibility as a faculty member in the AMIS Department.



D. SCOTT SINK, Ph.D., P.E.

LeanSigma Certification Program Director
Integrated Systems Engineering
College of Engineering, The Ohio State University



Scott is a native of Findlay, Ohio and a graduate of The Ohio State University (1973, 76, 78). He spent three years with Eastman Kodak as a Service Systems Engineer, in Rochester, NY, after receiving his BS in Industrial and Systems Engineering. Scott returned to Ohio State as a Graduate Research Assistant funded by an NSF Grant Studying White Collar Productivity Measurement.

Upon completion of his Ph.D. in Interdisciplinary Studies (based in ISE), he joined the faculty at Oklahoma State University from 1978-1984. In the Fall of 1984, Scott joined the ISE faculty at Virginia Tech and led the Virginia Quality and Productivity Center from 1984 through 1997.

Scott matriculated to the Private Sector in 1997 and served as VP of Business Process Reengineering for Exchange Solutions (Boston/Toronto) and then from 2004-2007 as VP of Business Process Improvement for MDS, Intl. (Toronto). He designed and launched a very successful LeanSigma Program for MDS (Global Life Science Company). In the Fall of 2007, he decided to return to academia and his alma mater. The LeanSigma Certification Program has been exceedingly well received by ISE candidates and the 25 projects to date have generated some \$5M in direct benefits to local business and industry.



DR. LARS MAASEIDVAAG

MoreSteam.com Senior Faculty



Dr. Maaseidvaag has been working in the Lean Six Sigma and Process Improvement industry for over 20 years. His client work has included industries from heavy industrial manufacturing to health care services. While his early career was focused on project execution, training and coaching, the last several years have focused on curriculum development and training methodologies. He acted as curriculum director for The George Group for the last 3 of his 11 years with them, before leaving to become more involved in blended learning and advanced process modeling tools.

Lars' 20 years of experience with process simulation and mathematical optimization programming will provide a unique insight into the leading edge tools being used to further advance the traditional Lean Six Sigma methodology.

Dr. Maaseidvaag's education includes an MBA and Masters of Engineering in Operations Research from The University of Texas, Austin, as well as a Ph.D. in Operations Research from the Illinois Institute of Technology. In the MoreSteam.com MBB program, he will integrate the learning of Lean tools and concepts with advanced process modeling methods to help the students gain a deep understanding of the strengths and limitations of the Lean toolkit, while at the same time gaining a good understanding of simulation and optimization process modeling techniques.



EDUARDO SANTIAGO

Technical Training Specialist - Minitab, Inc.



Eduardo Santiago draws on his experience as a quality improvement professional and a teacher to train people to use quality statistics successfully. Eduardo joined Minitab's technical support team in 2006, assisting Minitab users with technical issues and working with them to identify and resolve problems with data and choosing appropriate statistical methods. He began teaching Minitab classes shortly after joining the company.

Eduardo earned a bachelor's degree in industrial engineering from CETYS-Universidad, one of Mexico's premier educational institutions, and later earned a M.Eng. and a Ph.D. in industrial engineering and operations research from Penn State University, focusing on optimal design theory and how to collect the greatest amount of useful data in the fewest number of runs in expensive testing situations.

He earned his Six Sigma Green Belt certification from Sony while working as a quality improvement consultant for clients such as Plantronics, RCA Display, URBI Homes and Markofoam, a Sony supplier. Before becoming a consultant, Eduardo spent five years teaching mathematics, statistics, chemistry and physics. Eduardo also taught an undergraduate engineering economics course at CETYS University.

Updated: 11/22/11