Maximize the Impact of Your Six Sigma Initiative

Six Sigma Qualtec is committed to helping clients drive superior business results. Master Black Belts are instrumental in maximizing the impact of any Six Sigma initiative.

Six Sigma Qualtec’s Master Black Belt (MBB) Certification meets the evolving needs of today’s businesses. An MBB must place a greater emphasis on meeting specific objectives, achieving dramatic improvements in performance, and producing a demonstrable return on investment.

Develops the skills and transfers the knowledge required to facilitate dramatic performance improvement for your organization:
- Project Management skills ensure project completion,
- Advanced tools and capabilities useful in daily activities, and
- Mentoring skills to achieve results, transfer knowledge more effectively

Defining the Master Black Belt

A Master Black Belt needs superior project management skills to avoid a common cause of ineffective Six Sigma initiatives – poor project completion. The MBB accelerates and ensures project completion by keeping the Black Belts on-track and on-time.

Having more advanced technical and analytical skills is crucial to solving the more difficult problems and to helping others involved with the initiative. The specific skills to be acquired by each MBB should be aligned with the MBB’s daily responsibilities.

Mentoring is one of the MBBs primary functions – making it a primary component of our certification program. This responsibility for other belts in the organization – and their success – requires specific skills of the MBB.

Communicating effectively, teaching problem solving to others, and being a true agent of change all require enhanced capabilities. The Six Sigma Qualtec-trained Master Black Belt is equipped to make your Six Sigma initiative succeed.
Course Structure

Six Sigma Qualtec will create a customized program to meet your needs. Master Black Belt candidates are certified after completing their Super Project and the required coursework, both of which specifically address your organization’s goals. The training duration varies but includes 13-19 days of instruction over a period of 6-12 months.

The primary components of Six Sigma Qualtec MBB Certification:

- Individual MBB Candidate Mentoring: the personalized review of prerequisite credentials, the Super Project, and the evaluation and certification of teaching and mentoring.
- Advanced Study Options: the classroom instruction portion of the program.

Mentorship and Project Management Skills

MBB candidates will mentor several individuals who are working on Six Sigma projects or other problem solving efforts. Six Sigma Qualtec’s instructors evaluate their mentoring abilities using defined criteria to measure the breadth and development of these skills. A positive evaluation will earn the candidate a mentorship certification.

Advanced Study

To develop expertise in the areas most relevant to their responsibilities, MBB candidates must complete at least three of the following:

- Design for Six Sigma - DFSS
- Leveraging Customer Intelligence – VOC and QFD
- LEAN Training
- Advanced Topics – DOE and Statistics
- Advanced Transactional Skill Set
- Successful Mentoring

A broad selection of additional coursework - such as “Project Management” and “Leadership Skills” - is also available for incorporation into an MBB training program. The SSQ Learning Center will work individually with clients to review and/or develop a curriculum that meets your organization’s needs.
Demonstrated Project Experience
Each MBB candidate must conduct a “Super Project”, a learning tool for a candidate that generates ROI by driving improvements in a company’s products or services.

Super Project customarily:
- Addresses a chronic problem crossing departmental and/or divisional boundaries
- Generates a minimum of $1 million in savings
- Involves 2-5 Black Belts for support
- Takes 9-12 months for completion

Competency is assessed through the candidate’s presentation and defense of the project to Six Sigma Qualtec and the client company management.

Teaching Skills  (Optional*)
Master Black Belts are often called upon to teach principles of Six Sigma and process improvement, requiring a mastery of the curriculum and an ability to manage an efficient and effective class. Six Sigma Qualtec’s instructors evaluate the teaching abilities of MBB candidates using defined criteria – as the candidate teaches before an in-house class or a Six Sigma Qualtec audience. A positive evaluation will earn the candidate a teaching certification.

* Not every MBB inside an organization is expected to teach, so this component of the MBB training program is considered optional. The successful completion of the Teaching Skills program will be recognized separately and prominently on the candidate’s certification.

MBB Candidate Selection Process
The selection of the MBB candidates themselves is one of the most important factors in building effective Master Black Belts. Important attributes to consider include:
- Respected member of the black belt community
- Natural leadership skills
- Effective coaching and teaching skills
- Project management experience
- Strong political skills; able to marshal resources as needed
- Ability to communicate at all levels in an easy-to-understand manner
- Business acumen

If a candidate requires improvement, additional coursework will be suggested to close any perceived gaps in the candidate’s skill set.
## SIX SIGMA PROGRAMS

### Master Black Belt
**Expand Your Six Sigma Deployment while Mentoring Black Belts**

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<table>
<thead>
<tr>
<th>Advanced Study Topics</th>
<th><strong>MBB candidates must choose a minimum of 3 out of 6 Advanced Study Topics</strong></th>
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<tbody>
<tr>
<td><strong>Course</strong></td>
<td><strong>Training Agenda</strong></td>
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<tr>
<td>5 Days</td>
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| Manufacturing or Services | 1. Design for Six Sigma (DFSS)  
• Project risk assessment and Project financial analysis  
• Voice of the Customer Overview  
• QFD Overview  
• Benchmarking  
• Product Cost Analysis  
• Product Scorecard  
• Statistical Tolerance Analysis  
• DFMA  
• Reliability  
• Planned and Preventative Maintenance  
• Concept Selection (Pugh) and Acquisition Selection |
| 4 Days                | 2. Leveraging Customer Intelligence  
• Define Existing Processes  
• Voice of the Customer – VOC  
  - Identifying, gathering, analyzing & prioritizing customer needs  
• Quality Function Deployment – QFD  
  - Designing services  
  - System, delivery process, materials & operations planning |
| 5 Days                | 3. Lean Training  
• 5S  
• Theory of Constraints  
• Continuous Flow  
• Job/Load Leveling and Takt time  
• Spaghetti Charts  
• Time Study Analysis  
• Continuous Improvement  
• Implement, validate and standardize  
• Visual Workplace  
• SMED |

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*six sigma training that immediately improves your bottomline*
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<td>4. Advanced Topics</td>
<td>• Advanced Design of Experiments</td>
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<td>• Advanced Statistics</td>
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<tr>
<td>5 Days</td>
<td>• Introduction to simulation (<em>Discrete event simulation</em>)</td>
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<td>• Decision systems analysis</td>
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<td>• Classes and causes of non-normality</td>
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<td>• Capability with non-normal data</td>
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<td>3 Days</td>
<td>6. Successful Mentoring</td>
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<td>• Overview of Mentoring</td>
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<td>• Skill sets/Talent involved in Mentoring</td>
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<td>- The art of coaching/counseling</td>
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<td>- Unleashing Personal Motivation</td>
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<td>- Talent assessment – DISC or Adult Mentoring Inventory</td>
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<td>• Planning and Implementing Workable Strategies</td>
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<td>• Using the OJT Knowledge Transfer Tool</td>
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<td>• Shadowing and observation</td>
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<td>- Mentoring competence assessment.</td>
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<td>• Final Project Review &amp; Candidate certification</td>
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<td>- Client mentor reviews a final report</td>
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<th>Supplemental Study</th>
<th>Available at additional cost to MBB candidates to hone their skill sets</th>
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<tr>
<td>1. Enhanced Training Techniques</td>
<td>• Instructor Preparation</td>
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<td>2. Tutoring</td>
<td>• Guidelines for Using Visual Aids</td>
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<td>• Communication</td>
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<td>• Enhanced Learning</td>
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<td>• Instructor Techniques</td>
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<td>as needed</td>
<td>• To Achieve Baseline Black Belt Knowledge</td>
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SIX SIGMA PROGRAMS

Master Black Belt
Expand Your Six Sigma Deployment while Mentoring Black Belts

Prerequisites

- MBB candidates must be certified Black Belts.
- MBB candidates must have six months experience and have completed and documented a minimum of three projects.
- MBB candidates are assigned SSQ advisors who review previous coursework and experience, as well as plan an individualized program based on the candidate’s profile.

six sigma training that immediately improves your bottomline
Our Instructors

Six Sigma Qualtec's training and support services fully equip candidates to achieve and sustain improvements long after certification training is completed. Qualtec Black Belt Instructors are the best of the best, each a Master Black Belt with 10+ years of Six Sigma Training experience in a wide range of business settings. Black Belt candidates are carefully matched with the appropriate mentor, based on industry background and organizational size and structure. This mentoring relationship continues after Black Belt Certification to ensure real world results and includes on-site visits, as well as assistance and monitoring of the Black Belt project.

Enterprise-Wide Deployment: We See the Big Picture

Six Sigma Qualtec is unique in the training industry, providing enterprise-wide training that focuses on overall corporate strategies. An initial assessment is used to map-out specific training and technology needs and to focus implementation on broader corporate objectives. Support continues beyond the training phase, ensuring alignment of all projects and sustainability of process improvements. Qualtec has been involved in building ground-floor process improvement initiatives that have significantly enhanced productivity, efficiency and customer satisfaction at world-class companies including Nokia, General Electric, Fannie Mae and Owens Corning.
Six Sigma Qualtec

Six Sigma Qualtec is a premier provider of performance improvement training, consulting and technology solutions that drive measurable financial results. Six Sigma Qualtec’s methodology is an integrated deployment of training and tools for achieving breakthrough performance including dramatically reduced cycle times, defects and costs. This approach has significantly improved productivity, efficiency and customer satisfaction with clients worldwide.

Our Mission

Enterprise performance improvement centers on your ability to accurately identify and deliver the products and services your customer values most. Your ability to deliver customer value is dependent upon the skillful integration of leadership and human capital with finely tuned business processes. Six Sigma Qualtec helps you build the capabilities to deliver what your customer needs and values most.

Train with the Experts

Six Sigma Qualtec’s proven training methods have helped hundreds of companies, in the Financial Services, HealthCare, Manufacturing, and Utility Industries to develop the internal knowledge and skills they need to maintain a competitive advantage through sustained performance improvement.