

## ▶ Advanced Tools

Advanced Tools training is designed to provide Green Belts, Black Belts and Master Black Belts with a mastery of DMAIC tools. This is an advanced class that is focused on helping participants learn how to apply Six Sigma techniques in unique situations. While Six Sigma came from manufacturing environment, many companies have gained tremendous benefit in service oriented processes. This course will also provide practitioners with advanced tools to tackle problems in the transactional environment.



Advanced Tools training is a critical component to helping students take their knowledge and skill set of DMAIC to master's level. This course is one of the electives of BMGI's Master Black Belt program.

### Course Description:

The course agenda integrates both a review of traditional Six Sigma tools along with invaluable advanced topics that are always asked about, but almost never taught. In this hands-on class, participants will achieve a level of proficiency and understanding that will take them well beyond the peers and enable them to solve previously unsolvable problems. Tools such as non-parametric testing, covariate DOE, and others are introduced for the first time.

Our program is suited for individuals in all industries.

### AT A GLANCE

**Course Length:**  
Consecutive 5 days

**Who Should Attend:**  
Highly recommended for MBB candidates and Black Belts who have completed at least one Six Sigma project. Appropriate for some Green Belts.

**Course Requirements:**  
Participants need a laptop computer running Minitab

This program is ideal for practicing Black Belts and Master Black Belts who have the desire or need to extend their knowledge and problem solving capability. It is also a great preparatory workshop for potential Six Sigma instructors. In addition, any Black Belt or Master Black Belt candidate who is responsible for training, mentoring, and/ or supporting other Black Belts or Green Belts will find this course very useful.

*Continued...*

“The material was very useful and additive and I’ve already begun referencing the material in support of some Black Belt and Green Belts. The investment was worthwhile.”

- Thomas Pezzino  
Master Black Belt  
DuPont

### KEY LEARNING OUTCOMES

**On completion of this course, participants will be able to:**

- Apply advanced DMAIC tools to unique real-world problems
- Analyze non-normal data to drive proper decision making
- Calculate capability metrics for non-normal data
- Investigate non-traditional scenarios for the application of DOE
- Acquire and analyze survey data for driving VOC
- Investigate forecasting problems
- Provide more capable mentoring to practitioners

## Advanced Tools

### Agenda:

#### Day I – Dealing with Non-Normality

- Welcome and Introductions
- Classes of Non-Normal Data
- Treating Non-Normal Data
- Non-Parametric Testing
- Non-Normal Capability Analysis

#### Day II – Design of Experiments

- DOE Review
- Covariate DOE
- Fixed V/s Random Factor DOE
- Mixture DOE



#### Day III – Regression

- Multiple Regression (Review)
- Advanced Multiple Regression
- Logistics Regression

#### Day IV – Introduction to Surveys

- Survey Design
- Survey Analysis

#### Day V – Introduction to Forecasting

- Forecasting with ARIMA

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BMGI holds this class regularly in cities around the world.

Training can also be scheduled on-site for a group of 10 to 15 participants.

Curriculum is also available for licensing

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## About BMGI?

Breakthrough Management Group International (BMGI), a global consulting firm, partners organizations to transform their business performance with a strong focus on delivering results. Today, BMGI is recognized as the world leader in harnessing the power of cutting edge techniques in the area of **Innovation, Strategy, Problem Solving** and **Business Transformation** for achieving tangible business results.

Headquartered in the US, BMGI has developed a loyal clientele across the globe. BMGI has partnered with organizations in various stages of their business life cycles and has delivered cumulative benefits of several billion dollars to its clients with an **ROI of 5:1 to 20:1**. In India, BMGI is located in Mumbai.

## Why BMGI?

BMGI has provided training to thousands of professionals across diverse sectors, empowering esteemed corporations in India and around the globe. BMGI's Green Belt certification sets the standard for excellence in professional development, trusted by top-tier companies worldwide to drive innovation and operational success.



**Solve Problems**

**Deliver Results**

**Be a Leader**

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Unlocking Potential Delivering Results