

## Lean Six Sigma Black Belt

### Overview

The accelerated lean Six Sigma Black Belt program and methodology allows students to complete certification requirements faster than traditional Six Sigma and Lean training programs. Successful candidates will be awarded the Lean Six Sigma Black Belt certification from Lean Sigma Corporation after passing the included Practicum certification exam. The certification exam is included in this course and you can take the exam at your convenience after passing section quizzes. You must complete the exam within 6 months of class. The exam requires the use of the MiniTab application. A free 30 day trial is available for student usage. This course may earn a Credly Badge.

### Prerequisites

- Lean Six Sigma Green Belt Boot Camp

### Target Audience

This course is designed for business professionals with a college degree or those professionals who have significant experience in business operations. This course is also the next step for those who have earned the Lean Six Sigma Green Belt Certification. Also invited to attend are students who have completed a Green Belt program through an external vendor or through an in-house program.

### Course Outline

#### 1 - Lean Six Sigma Overview

Review Lean Six Sigma  
 DMAIC Model  
 Black Belt Roles and Responsibilities

#### 2 - Lean Six Sigma Leadership

Stakeholder Management  
 Tollgate Reviews  
 Leading Teams  
 Change Management  
 Project Selection Strategies

[Register Online](#)

### Schedule

Class Length: 5 Days

G2R = "Guaranteed to Run"   OLL = "Online LIVE" ILT = "Instructor-Led-Training"					
08/22/22	G2R	4:00PM - 12:00AM	Tallinn	OLL	€ 4125.00
12/05/22		4:00PM - 12:00AM	Tallinn	OLL	£ 4125.00
02/13/23		6:00PM - 2:00AM	Tallinn	OLL	€ 4125.00
03/06/23		4:00PM - 12:00AM	Tallinn	OLL	£ 4125.00
06/26/23		4:00PM - 12:00AM	Tallinn	OLL	€ 4125.00

### 3 - Measure Phase

Introduction to SPC XL software  
Measurement Systems Analysis  
Sampling Strategies and Calculations  
Process Capability; DPMO Calculations  
Rolled Throughput Yield  
Charts: Histogram, Pareto, Box Plot and Scatter Plot  
Lean Metrics

### 4 - Analyze Phase

Generating Root Cause Hypothesis  
Validating Hypothesis  
Scientific Method and P-Values  
Statistical Testing: T-Tests, ANOVA  
Statistical Testing: Proportion Tests, Chi-Square  
Statistical Testing: Correlation and Regression

### 5 - Improve Phase

Lean Solution Concepts  
Design of Experiments (DOE)  
Failure Modes and Effects Analysis (FMEA)  
Capturing Improvement Data

### 6 - Control Phase

Statistical Process Control  
Control Charts: C Chart, P Chart, X-bar & R Chart  
Project Communication and Replication

### 7 - Black Belt Test

---