

# LEAN SIX SIGMA TRAINING

## Lean Six Sigma Green Belt

### Format:

- Pre-Req: completion of Lean Thinker and Lean Problem Solver
- Green Belt Program (8 weeks + Project)
  - Flipped Classroom Model: 12 hours of online content (1-2 hours per week) + 8 hours of group reflection sessions (1 hour per week)
  - 80% or above score on Green Belt exam
  - Completion of process-level DMAIC project

### Audience:

- Advanced front line team members

### Description:

The Lean Six Sigma Green Belt program is an investment program for team members who have a desire to help solve problems within their work teams and functional areas.

## Lean Six Sigma Black Belt

### Format:

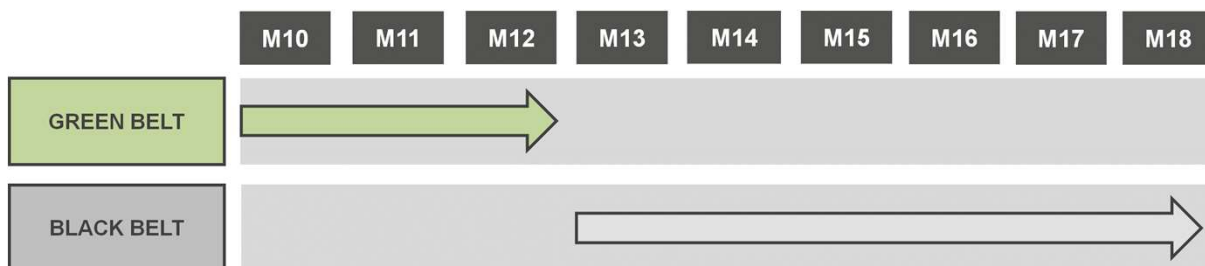
- Pre-Req: completion of Green Belt
- Black Belt Program (2 weeks + Project)
  - Instructor-Led Virtual: 2 weeks (4 hours/day)
  - 80% or above score on Black Belt exam
  - Completion of value-stream level DMAIC project (6 – 12 months)

### Audience:

- Continuous Improvement and Transformation Leaders

### Description:

The Lean Six Sigma Black Belt program is an investment program for leaders who have a desire to lead strategic business improvements using change management, advanced analytical skills, and project management



**TRANSPLACE**

# LEAN SIX SIGMA BLACK BELT COURSE

## Format:

- Blended: On-Site or virtual Workshop + Individual Coaching

## Duration:

- 11-23 weeks overall from course start to project completion
- Two Weeks | Workshop + Kaizen Project

## Languages:

- English

## Certification:

- Prerequisites:
  - Read: "People: Building, Managing & Sustaining Lean Organizations"
  - Complete: LSS Green Belt Certification
- Submit Process Improvement Project
- Available for print or download. Digital Credly badges can be added to social media profiles and/or email signatures

# LEAN SIX SIGMA BLACK BELT COURSE AGENDA

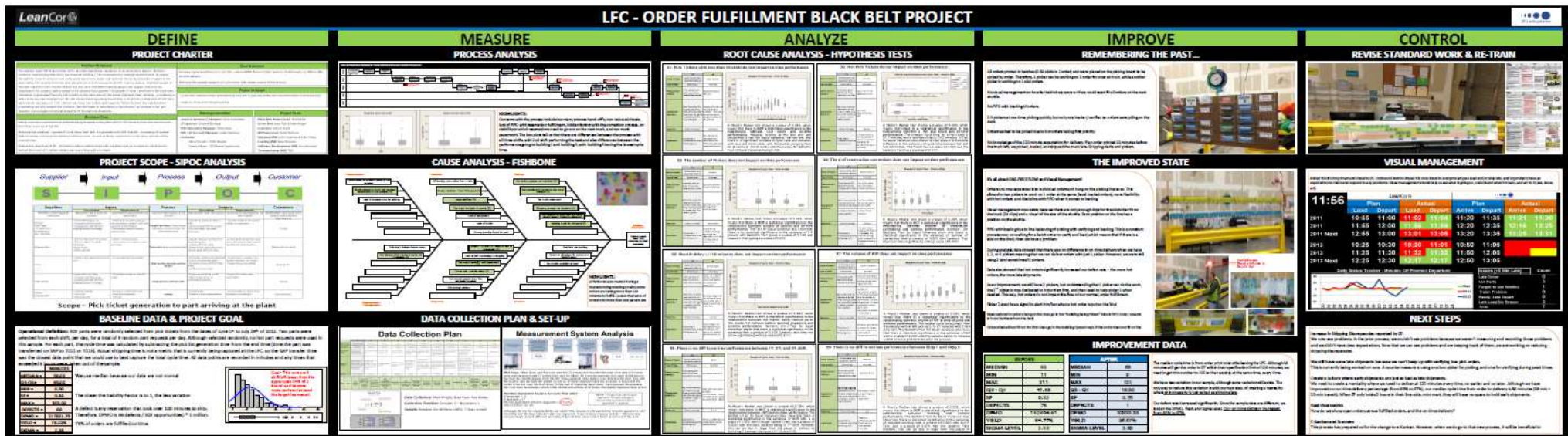
Black Belt Week 1		
DAY 1 - Monday		
Module		MIN
Welcome and Review of Black Belt Agenda and Expectations		60
Leading Change - The Problem Solving Culture		60
Break		15
Project Elevator Speech		30
Project Failure Modes and Effects Analysis (Green Belt Project Reflection)		60
End of Session PDCA		15
DAY 2 - Tuesday		
Module		MIN
Review of Day 1 and Completion of FMEA		45
Review of DMAIC and the Define Phase		30
Uncovering Opportunities - Introduction to Value Stream Mapping		60
Break		15
Value Stream Mapping Practice		75
End of Session PDCA		15
DAY 3 - Wednesday		
Module		MIN
Review of Day 2		15
Current State Mapping - Value Stream Mapping Planning		90
Break		15
Project Selection - Identifying Critical Variables and Prioritizing		60
Define the Project - Review of Project Charter Inputs		45
End of Session PDCA		15
DAY 4 - Thursday		
Module		MIN
Review of Day 3		30
Stakeholder Analysis and Communication Plan		90
Break		15
Review of the Measure Phase		15
Understand and Measure the Process		30
Baseline Process Capability and Potential - DPMO		15
Baseline Process Capability and Potential - Cp and Cpk		30
End of Session PDCA		15
DAY 5 - Friday		
Module		MIN
Review of Day 4		30
Measure Process Behavior - Control Charts		90
Break		15
Measure Defects - Pareto Analysis Review		30
Coaching Process Mapping, Fishbone, 5 Why		60
End of Session PDCA		15

Black Belt Week 2		
DAY 1 - Monday		
Module		Start
Welcome and Review of Black Belt Project Progress (Risks and Concerns)		60
Hypothesis Testing Overview - Developing Null and Alternate Hypothesis Statements		20
Data Collection Planning		45
Break		15
Measurement System Analysis		90
End of Session PDCA		10
DAY 2 - Tuesday		
Module		Start
Review of Day 1		10
Hypothesis Testing - Confidence Intervals, Rejection Regions, and p-values		90
Break		15
Data Sampling		45
Review of Minitab and Types of Hypothesis Tests		10
t-tests: 1-Sample, Paired, and 2-Sample		60
End of Session PDCA		10
DAY 3 - Wednesday		
Module		Start
Review of Day 2		35
Analysis of Variance (ANOVA)		60
Contingency Tables (chi-square test)		45
Break		15
Simple Linear Regression		45
Hypothesis Testing for Non-Normal Data		30
End of Session PDCA		10
DAY 4 - Thursday		
Module		Start
Review of Day 3		15
Review of Improve and Control Phase Checklist		10
Design of Experiments for Testing Potential Solutions		90
Break		15
Lean Principles for Stability and Flow		100
End of Session PDCA		10
DAY 5 - Friday		
Module		Start
Review of Day 4		15
Management Systems and The 6 Control Methods - The Control Plan		90
Break		15
Project Working Session - Identify Next Steps and Coaching Schedule		90
End of Workshop Review and Next Steps		30

**TRANSPLACE**

# FINISHED BLACK BELT PROJECT EXAMPLE

STORYBOARD TEMPLATE AND TOOLS PROVIDED TO STUDENTS



Students will use this storyboard to complete and present their project and change management story.

**TRANSPPLACE**