



## Lean Sigma Yellow Belt Champion

**Description:** The Lean Sigma Yellow Belt works to support projects by reviewing process improvements that can support the process. This class teaches the student the role and concepts of being a Yellow Belt. As a Yellow belt is still relatively new to the Lean Sigma program the class will reinforce concepts needed to grow and become a more efficient team member. The class will review terms and work on cases keeping in mind the student is in a support role at this level.

### Session 1: Course Overview.

- Introduction
- What and Why Six Sigma?
- Six Sigma concepts - defects
- Six Sigma concepts - CT tree
- Deployment of Six Sigma
- Deployment of Six Sigma - Steps of the methodology and  $Y=f(x)$

### Session 2: Recognize

- Overview of phase
- SIPOC (aka COPIS)
- Value added and Non-Value added
- 7 types of waste
- Process flow charts
- Summary

### Session 3: Define

- Overview of phase
- Problem statements
- 5W2H
- Summary

### Session 4: Measure

- Overview of phase
- Root cause identification
- Brainstorming
- Fishbone diagrams
- Tree diagrams
- FMEA

### Session 5: Data

- Data collection objectives
- Why do we need data
- Types of data
- Sampling
- Data collection sheets
- Measurement Error
- Repeatability and Reproducibility
- Data description
- Histograms
- The mean and the range
- DPU, DPO, DPMO
- Summary

### Session 6: Analyze

- Overview of phase
- Run chart
- Scatter Plot
- Example and warnings
- When to use it and not to use it
- Pareto chart
- Summary

### Session 7: Improve

- Overview of phase
- Priority matrix
- Poka-Yoke
- 5S
- Summary

### Session 8: Control

- Overview of phase
- Control tools
- The human factor: resistance to change
- Control plan
- Summary