



ILSSI Certified Lean Six Sigma Black Belt (including Yellow Belt and Green Belt curriculum)

Yellow Belt level

- o L001 Introduction to Lean
- o S001 Introduction to Six Sigma
- o S001-1 Introduction to DMAIC
- o L002-1 Writing Effective Problem Statements
- o L002-2 Introduction to Kaizen
- o L002-3 Using the A3 Report for Rapid Improvement
- o L002-4 SIPOC Mapping
- o L003-1 Understanding and Implementing 5S/6S
- o L003-2 Implementing and Facilitating Lean "Huddles"
- o L003-3 Visual Workplace
- o L003-4 Standard Work
- o L004-1 Mapping the Process
- o L004-2 Spaghetti Diagrams

Green Belt level

- o L004-3 Gemba (Waste) Walks
- o S002-1 Failure Modes and Effects Analysis
- o S002-2 Error-Proofing/Mistake-proofing
- o S003 Controlling the Process
- o S004 Assessing Process Capability
- o L005-1 Constructing Project Charters
- o L005-2 Managing Change
- o L006-1 Brainstorming, Affinity Diagrams & Team Voting
- o L006-2 Cause & Effect Diagrams & the Five Whys
- o L006-3 Pareto Charts and the 80/20 Rule
- o L007 Value Stream Mapping



- o L008 Kanban and Material Management
- o L009-1 Work levelling/Load Balancing
- o L009-2 Work Cell Design & Improved Office/Facility Layout
- o L010 Rapid Changeover Techniques/SMED
- o L011 Total Productive Maintenance (TPM)
- o L012 Process Control Plans and Control Charts
- o S005 Introduction to Basic Statistics
- o S006-1 The Normal Distribution
- o S006-2 The Standard Normal (Z) Distribution
- o S006-3 Testing for Normality
- o S007-1 Graphical Analysis - The Histogram
- o S007-2 Graphical Analysis - The Boxplot
- o S007-3 Graphical Analysis - The Scatter Plot
- o L013 Lean Deployment Strategy and Methods
- o L014 Lean and Green: The Environmental Benefits
- o S008 Central Limit Theorem and Confidence Intervals
- o S009 Introduction to Hypothesis Testing
- o S010 Data Collection and Sampling
- o S011 MSA - Gauge R & R Studies
- o S012 MSA - Attribute Agreement Analysis
- o S013-1 Process Capability Measures - Discrete
- o S013-2 Process Capability Measures - Continuous
- o S014 Correlation and Simple Linear Regression

Black Belt level

- o S015 Discrete & Continuous Probability Distributions
- o S016 Hypothesis Testing - Mean and Median
- o S017 Test for Equal Variance



- o **S018 Analysis of Variance (ANOVA) and ANOM**
- o **S019-1 Proportion Testing**
- o **S019-2 Chi-Square Analysis**
- o **S020-1 Voice of the Customer - Kano Analysis**
- o **S020-2 Voice of the Customer - Net Promoter Score**
- o **S021 Use of Data Transformation in Analysis**
- o **S022 Introduction to Logistic Regression**
- o **S023 Introduction to General Linear Models (GLM)**
- o **S024 Introduction to Reliability Life Data Analysis**
- o **S025 Introduction to Design of Experiments (DOE)**
- o **S028 Introduction to Design for Six Sigma**