



LEAN
SOLUTIONS
ACADEMY

Lean & Six Sigma Training
**Lean Yellow Belt
Certification**

brought to you by:



**PATRICK
ADAMS**
CONSULTING

Meet Your Instructor



- Background
- Lean Solutions "Train-The-Trainer" Course
- Internationally Certified Trainer



CLASS SCHEDULE

Day 1

- Roles and Responsibilities of Belts
- What is Lean & Six Sigma?
- Lean Principles
- Standard Work
- 8 Wastes
- 5S
- Voice of the Customer (VOC) and CTQs Process
- Jidoka
- Poke Yoke

Day 2

- Day 1 Review
- PDCA
- Kaizen
- Pull
- Kanban
- Flow
- Visual Management
- SMED
- Total Productive Maintenance
- **YELLOW BELT EXAM**
(as Homework)

Yellow Belt

The Fundamentals of Lean Six Sigma
History / Process / Cause & Effect
Principles of Lean / Six Sigma
Process Mapping / DMAIC
PDCA / Kaizen & Kaizen Events
Kano Analysis
Voice of Customer, & Business

Defining a Process / CTQ
The 8 Elements of Waste / Belt Roles
5S / Lean Tools / Visual Management / SMED
Kanban / Poka-Yoke / Standardized Work
Lean & Six Sigma Belt Roles
Total Productive Maintenance
Value Add & Non Value Add Work

Lean Green Belt

Project Management
Project Charter
SIPOC
7-Quality Tools / Pareto Analysis
Control Charts
Control Plans
Gantt Chart
Structured Problem Solving

Fishbone Diagrams / Graphical Analysis
Lean Metrics & Projects
FMEA
Facilitating a Kaizen Event
Strategy Execution
Hoshin Kanri
Change Management

Six Sigma
Green Belt

Six Sigma Statistics
Measurement Systems Analysis
Process Capability

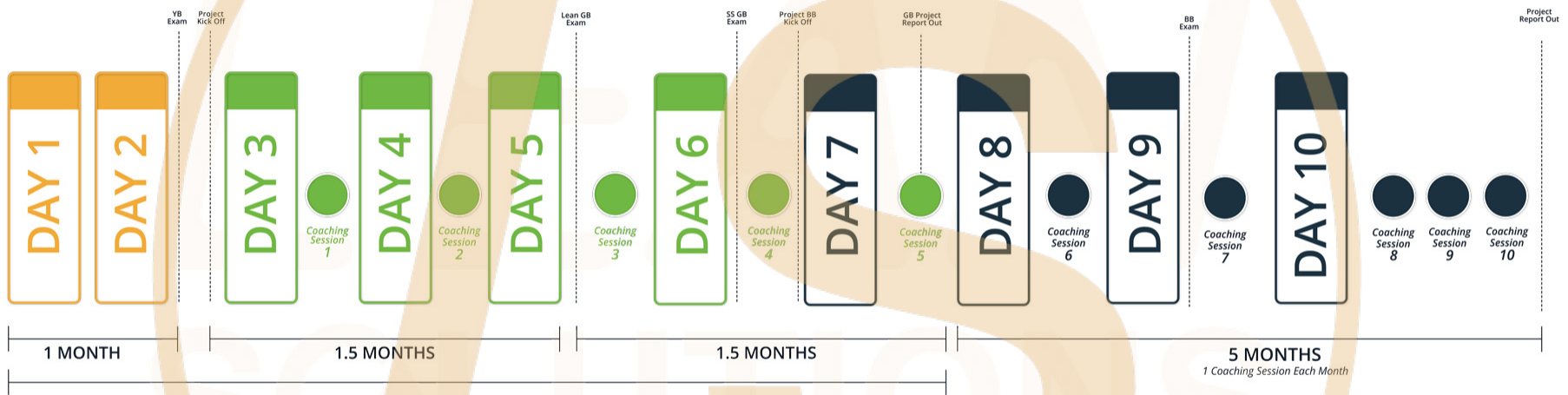
Correlation and Regression
Introduction to DOE
Hypothesis Testing

BODY OF KNOWLEDGE

Black Belt

Mann-Whitney / Kruskal-Wallis
Friedman Mood's Median / Simple Linear Regression
1 Sample Sign / 1 Sample Wilcoxon
One and Two Sample Proportion
Chi-Squared (Contingency Tables)
Correlation / Regression Equations
Regression Equations / Residuals Analysis
Non- Linear Regression
Multiple Linear Regression
Confidence & Prediction Intervals
Designed Experiments / OFAT
Experiment Objectives
Experimental Methods
Experiment Design Considerations
Linear & Quadratic Mathematical Models

Orthogonal Designs
Full Factorial Experiments & Designs
Fit, Diagnose Model and Center Points
Taguchi Designs Control Phase
Statistical Process Control (SPC)
Data Collection for SPC / I-MR Chart
Xbar-R Chart / U Chart / P Chart
NP Chart / X-S chart
CumSum Chart / EWMA Chart
Binomial Distribution and Calculations
Poisson Distribution and Calculations
Design for Six Sigma (DFSS) / Hoshin Kanri
Cost Benefit Analysis / ROI, Payback Period



4 MONTHS
Classes Every Other Week

HOMework

As a Yellow Belt student, you are expected to review and complete the homework for each lesson.

The assignments can be accessed on the student dashboard inside your course.

A screenshot of a homework assignment list. The list is titled "Homework" and contains six items, each with a radio button icon. The items are: "Homework - Due before Day 2", "Homework - Due Before Day 3", "Homework - Due before Day 4", "Homework - Due before Day 5", "Homework - Review", and "ILSSI Green Belt Exam Information".

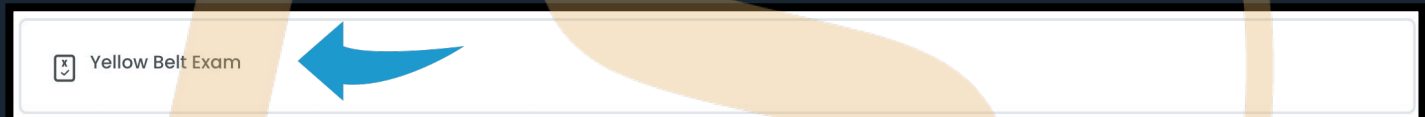
Homework	
<input type="radio"/>	Homework - Due before Day 2
<input type="radio"/>	Homework - Due Before Day 3
<input type="radio"/>	Homework - Due before Day 4
<input type="radio"/>	Homework - Due before Day 5
<input type="radio"/>	Homework - Review
<input type="radio"/>	ILSSI Green Belt Exam Information

YELLOW BELT CERTIFICATION EXAM

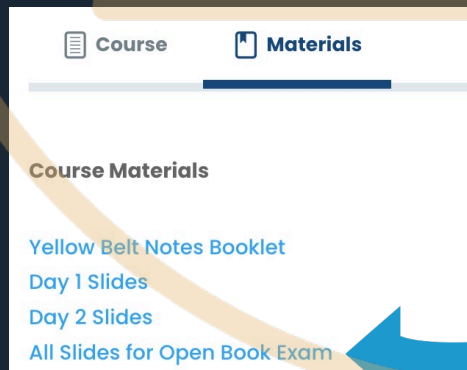
- Lifetime certification
- Done online on your student dashboard after training is finished
- Open Book
- 50 Multiple Choice Questions
- Pass mark is 70%
- Result issued immediately
- Retake is available

YELLOW BELT CERTIFICATION EXAM

Find information on how to access the exam on the student dashboard



Download the class PowerPoint slides (as a searchable pdf) to help while studying for and taking the exam



LEAN SIX SIGMA ROLES & RESPONSIBILITIES

Champion + Executive Support

Black Belts

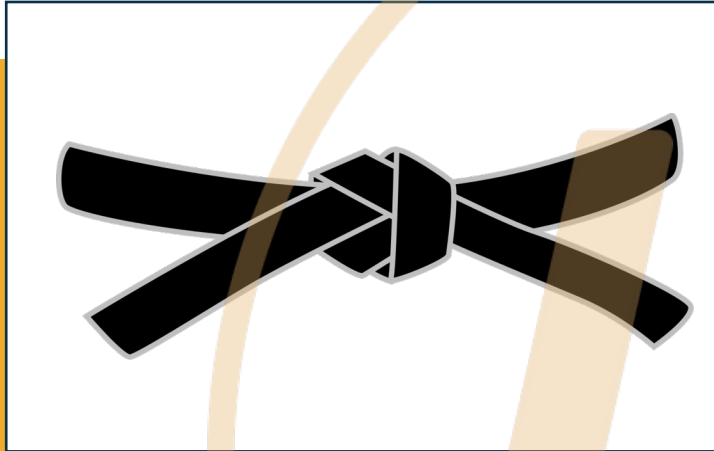
Green Belts

Yellow Belts

CHAMPION/ PROCESS OWNER

Champions help to identify and select the most important projects to work and break down political barriers / roadblocks for Lean Six Sigma to succeed

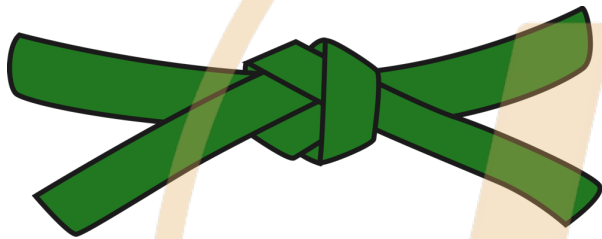
- Assist with Project selection and initiation
- Obtain needed project resources and eliminate roadblocks
- Participate in project review meetings
- Provide Governance / Ask the right questions
- Set up a training programs



BLACK BELT

Black Belts are Lean Six Sigma process experts, think strategically and lead larger projects within the business.

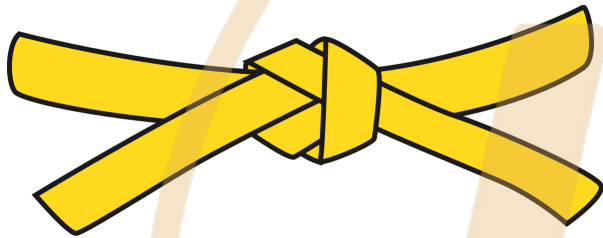
- Approx 1 Black Belt every 50 - 100 employees (1%)
- Dedicated to process improvement 100% of time
- Project team leader for larger / high profile projects
- Facilitates project teams and helps Green belts
- Thinks strategically and towards Enterprise level goals
- Works cross-functionally



GREEN BELT

Green Belts are practitioners of Lean Six Sigma improvement and lead small/medium projects or support larger Black Belt Projects.

- Approx 1 Green Belt for every 10-30 employees (5%)
- Involved approx 50% time on projects
- Typically works projects within their functional area
- Team members for larger projects
- Team leaders for small / medium projects



YELLOW BELT

Yellow Belts are Workers and Functional Specialists and apply the Lean Six Sigma Methodology to their own work and serve on project teams on a part-time basis.

- As many as possible (target is 100% of workers)
- Functional workers, Subject Matter Specialists.
Team members
- Provide support to Black Belts and Green Belts as needed
- Team members on project teams
 - Supporting projects with process knowledge and data collection



What is
Lean & Six Sigma?