Lean Six Sigma Green Belt Certification Program

Length: 6 Days of Classroom Instruction and 3 Days of mentoring

Summary: The Lean Six Sigma Green Belt Certification Program is based on "Learning while Doing". Classroom sessions included numerous hands-on simulations to emphasize the learning points and allow practice with the LSS tools. This LSS Green Belt program will produce capable, competent, "practitioners" who will lead successful Lean Six Sigma improvement projects.

The LSS GB course is designed to have an equivalent of 6 days of classroom instruction and 3 days of mentoring. To provide a balance of instruction and mentoring the classroom day will be broken down each day as 1/3 mentoring and 2/3 classroom instruction.

There will be three blocks of training and mentoring spaced approximately 4 weeks apart to allow adequate project progress. Project tollgate presentations will be part of the mentoring time during each session.

After Session 3, the Green Belts will be ready to take the online three-hour exam.

Certification requirements: Students attend instructor led classes, pass the exam with 80% or greater score, and complete one DMAIC project that is review by the instructor within 6 months.

Note: all students will be required to have laptop computers and have access to Minitab 17 or 18 for statistical analysis during the class.

COURSE CONTENT

Day 1:
- Introduction and expectations
- Define Phase introduction
- Lean Six Sigma Overview (includes project selection)
- Project Charter
- Define wrap up
- Mentoring: Define Phase activities

Day 2:
- Project Charter presentation by Green Belts
- Value of Speed
- Seeing and Measuring variation
- Sigma Plane simulation (Round 1)
- Mentoring: Define Phase activities

Day 3:
- Value Stream Mapping
- Map Sigma Plane (Round 1)
- Process Capability
- Cause & Effect Matrix
- Mentoring: Define Tollgate reviews

Day 4:
- Sigma Plane simulation (Round 2)
- Data Collection Plan
- Measurements System Analysis (with variable data simulation)

- Mentoring: Measure & Analyze Phase activities

Day 5:
- Measurement System Analysis (continued – with attribute simulation)
- Measure wrap up
- Analyze introduction
- Failure Mode & Effects Analysis (FMEA)
- Control Charts (SPC)
- Mentoring: Measure & Analyze activities

Day 6:
- Confidence Interval/Hypothesis testing/Analyze paths
- Sigma Plane simulation (Round 3)
- Mentoring: Measure & Analyze Tollgate reviews

Day 7:
- Correlation & Regression
- T-Test Man Whitney test
- Analyze Phase wrap up
- Improve Phase introduction
- Process Flow & Line Balancing
- Mentoring: Improve & Control activities

Day 8:
- Process Flow & Line Balancing (cont.)
- Kaizen Methodology
- Lean Improvement Tools
- Mentoring: Improve & Control activities

Day 9:
- Piloting the solution
- Improve wrap-up
- Control introduction
- Training and facilitation skills
- Exam and certification requirements
- Mentoring: Improve & Control Tollgates – final project report outs