

OFFICE for EDUCATIONAL OUTREACH
BGSU Firelands
“LEAN SIX SIGMA” Certificate Training
Fall 2010 - Spring 2011

Lean Six Sigma Methodology integrates **Six Sigma DMAIC Training** for Process Improvement with **Lean Enterprise Training** for Value Stream Management.

PROFESSIONAL CERTIFICATIONS:

GREEN BELT – Complete all required assignments, projects and exams with a cumulative score of at least a grade of B in each of the three required courses.

BLACK BELT – Complete the Green Belt Certificate requirements and an industry-focused project(s) with instructor and industry-sponsor approval. The industry-focused project(s) will then be due within 24 months from the completion of the courses and will document a minimum \$150,000 annualized savings to the industry-sponsor.

TRAINING REQUIREMENTS:

Course 1 – Choose from the **Manufacturing Focus** or the **Transactional-Service Focus**.

Manufacturing Focus: (Sign up for **QS 2650** for the **College Credit** option **OR** the **JIT 100** and **JIT 101** modules for the **Continuing Education** non-credit option.)

Topics include:

(1) JIT 100 – Basic Lean Manufacturing Process Improvement

- 5S Workplace Organization and Standardization
- Visual Control
- Total Productive Maintenance
- Quick Changeover
- Mistake-Proofing

(2) JIT 101 - Value Stream Management for Lean Manufacturing (Requires a team project and presentation)

- Product Quantity and Routing Analyses
- Waste Walk and Current State Mapping
- Lean Manufacturing Assessment and Lean Metrics

- Future State Mapping (Customer Demand, Continuous Flow, and Leveling stages)
- Kaizen Plans

Transactional-Service Focus: (Sign up for **BAT 2050** for the **College Credit** option **OR** the **BPI 100** and **BPI 102** modules for the **Continuing Education** non-credit option.) Topics include:

(1) **BPI 102 – 5S for Service Organizations and the Lean Office (Requires a team project and presentation)**

- Sort (organization)
- Set in Order (orderliness)
- Shine (cleanliness)
- Standardize (standardize the 1st 3Ss)
- Sustain (discipline)

(2) **BPI 100 – Structured Problem-Solving for Transactional Process Improvement (Requires a team project and presentation)**

- Describe the Problem
- Describe the Current Process
- Identify and Verify the Root Causes
- Develop a Solution and Action Plan
- Implement the Solution
- Review and Evaluate
- Reflect and Act on Learnings

Course 2 – (Sign up for **STAT 2000** for **College Credit**.) It is integrated with **basic statistical tools and applications** using **Minitab** software.

NOTE: Courses 1 and 2 may be taken in any sequence, but Course 2 must be completed before starting Course 3.

Course 3 – (Sign up for **QS 3600** for **College Credit**.) It covers the five stages of the **DMAIC (Define, Measure, Analyze, Improve, and Control) Methodology** and is integrated with **advanced statistical tools and applications** using **Minitab** software and Six Sigma **project management** using **Quality Companion** software. (**Requires a team project and presentation**)

- An Overview of the Lean Six Sigma Methodology,
- **MINITAB** Measurement Systems Analysis,
- **MINITAB** SPC Control Charting and Capability Studies,
- Process Failure Mode and Effect Analysis,
- **MINITAB** Six Sigma Design of Experiments

SCHEDULE of CLASSES:

FALL SEMESTER 2010

Course 1 – Transactional-Service Focus

College Credit option

BAT 2050 – Mon 7-10 p.m., Aug 23-Dec 13, (no classes Sept 6 & Oct 11), \$564 fee, and texts \$40 plus tax

Continuing Education non-credit option

BPI 102 – Mon 7-10 p.m., Aug 23-Oct 18, (no class Sept 6 & Oct 11), \$282 fee, and text \$15 plus tax

BPI 100 – Mon 7-10 p.m., Oct 25-Dec 13, \$282 fee, text \$25 plus tax

Course 1 – Manufacturing Focus

College Credit option

QS 2650 – Wed 5:30-9:30 p.m., Aug 25-Dec 15, (no class Nov 24), \$564 fee, and texts \$13 plus tax

Continuing Education non-credit option

JIT 100 – Wed 5:30-9:30 p.m., Aug 25-Sept 29, \$191 fee, text \$13 plus tax

JIT 101 – Wed 5:30-9:30 p.m., Sept 30-Dec 16, (no class Nov 24), \$373 fee, and same text as JIT 100

Course 2

College Credit only

STAT 2000 – Tue & Thurs 11:30-1:00 p.m., Aug 25-Dec 15, (no classes Oct 13 & Nov 26), \$564 fee, texts \$78 plus tax, and software: lease for \$30 or buy for \$100

SPRING SEMESTER 2011

Course 1 – Transactional-Service Focus

College Credit option

BAT 2050 – Tue & Thurs 8-9:30 a.m., Jan 11– May 3, (no classes Mar 8 and 10), \$564 fee, and texts \$40 plus tax

Continuing Education non-credit option

BPI 102 – Tue & Thurs 8-9:30 a.m., Jan 11-Feb 24, \$282 fee, and text \$15 plus tax

BPI 100 – Tue & Thurs 8-9:30 a.m., Mar 1-May 3 (no classes Mar 8 and 10), \$282 fee, and text \$25 plus tax

Course 1 – Manufacturing Focus

College Credit option

QS 2650– Mon & Wed 8:30-10:30 a.m., Jan 10-May 4, (no classes Jan 17, Mar 7 & 9), \$564 fee, and text \$13 plus tax

Continuing Education non-credit option

JIT 100 – Mon & Wed 8:30-10:30 a.m., Jan 10-Feb 16, (no class Jan 17), \$191 fee, and text \$13 plus tax

JIT 101 – Mon & Wed 8:30-10:30 a.m., Feb 21-May 4, (no classes Mar 7 & 9), \$373 fee, and same text as JIT 100

Course 2

College Credit only

STAT 2000– Wed 7-10 p.m., Jan 12-May 4 (no class Mar 9), \$564 fee, texts \$78 plus tax, and software: lease for \$30 or buy for \$100

Course 3 (only conducted during the Spring Semester)

College Credit only

QS 3600 – Tues 5:30-9:30 p.m., Jan 11-May 3, (no class Mar 8), \$564 fee, text \$74, and software: lease for \$60 or buy for \$200

For additional information please contact:

Peter Henning

Phone: 419-433-5560 or 800-322-4787, ext. 20678

Fax: 419-433-9696

Email: mphenni@bgsu.edu