

# Course Outline

## Lean Six Sigma Black Belt

**Course objective:** To advance knowledge, skills and abilities of students to lead change initiatives at the executive or strategic level of organizations

**Course description:** Project based curriculum that leverages the use of simulations, case studies and student interactions for the most effective learning experience. Students learn and practice the skills necessary to implement statistical process control (SPC), facilitate and use various strategic planning tools and methods, optimize machine up-time rates, alleviate organizational bottlenecks, calculate various financial metrics and ability to lead change initiatives in any organization.

There is a total of 30 classroom hours with additional 10-15 hours of reading, study and homework to be completed prior to course and during instructional week (see homework schedule). Students will be required to lead discussions.

**Classroom hours:** 9:00am – 4:00pm daily

**Course Strategy:** Five consecutive days of in-class, hands on learning.

Day 1: Organizational structures, KPIs, team facilitation and organizational change

Day 2: Total quality management, statistical process control and strategic planning

Day 3: Theory of constraints, project management, TPM, and Shingo process mapping

Day 4: DFSS, QFD, seven quality tools, culture of quality, gap analysis

Day 5: Benchmarking, systems thinking, course review and certification exam\*

### Upon completion

#### 1) Knowledge, skills and abilities

Ability to communicate business value of Lean Six Sigma

Ability to lead change initiatives across the organization

Ability to facilitate executive or strategic planning events

Effectively utilize and teach fundamentals of Lean Six Sigma

Possess a high degree of confidence to pass Lean Six Sigma Certification test

#### 2) Earned credential

Lean Six Sigma Black Belt “Certificate of Training” for course completion

or

Lean Six Sigma Black Belt “Certification” if pass certification test

#### 3) Provided resources

Hard copy workbook

Notepad, pen, and other course materials

#### 4) \*Certification test provided by American Association for Lean Six Sigma Certification (AALSSC)

Included with tuition

Computer based, open book, proctored test offered upon course completion