



## Lean Six Sigma

### Module 1—Introduction to Lean Concepts

- Course Welcome
- Introduction to Lean, Part 1
- Introduction to Lean, Part 2
- How Lean Fits Into the Six Sigma Framework
- Lean Gurus
- Theory of Constraints
- Why Lean is Not Only for Manufacturing
- Lean Tools

### Module 2—Visualizing Inefficiency

- What is Lean?
- What is Lean for Products?
- What is Lean for Services?
- Value Stream Mapping for Products, Part 1
- Value Stream Mapping for Products, Part 2
- Value Stream Mapping for Products, Part 3
- Value Stream Mapping for Services, Part 1
- Value Stream Mapping for Services, Part 2
- Value Stream Mapping for Services, Part 3

### Module 3—Focus of the Customer

- The Kano Model
- Value Driver Tree
- Critical to Quality (CTQ) Trees
- Failure Modes and Effects Analysis (FMEA)

### Module 4—Lean Projects

- DMAIC Tollgates
- Hoshin Planning
- 5S, Part 1
- 5S, Part 2
- Lean Accounting
- Lean Design for Products
- Lean Design for Services
- The Pull System for Products, Part 1
- The Pull System for Products, Part 2
- The Pull System for Services, Part 1
- The Pull System for Services, Part 2
- Takt Time
- Standardized Work
- Simulation Exercise—Process Control and Problem Solving

- Error Proofing for Products
- Error Proofing for Services
- Total Productive Maintenance (TPM)
- Overall Equipment Effectiveness (OEE)
- TRIZ
- Standard Operating Procedures for Products
- Standard Operating Procedures for Services
- Audits for Products
- Audits for Services
- Module 5—Other Considerations
  - Barriers to Lean Implementation
  - Barriers to Lean Implementation for Products
  - Barriers to Lean Implementation for Services
  - Lean Supply Chain
  - Strategic Planning and Lean
  - Certification Programs
  - Teams
  - Lean Examples in the Service Industry
  - Simulation Exercise—Managing a Process Layout
  - Simulation Exercise—Review of Year 1
  - Simulation Exercise—Review of Year 2
  - Simulation Exercise—Review of Year 3
- Module 6—Kaizen Events and Set-Up Reduction
  - Kaizen Events
  - Kaizen Events for Products
  - Kaizen Events for Services
  - Set-Up Reduction
  - Set-Up Reduction for Products
  - Set-Up Reduction for Services
  - Course Wrap-Up