



## Design For Six Sigma Standards

These open source standards represent the minimum required standards for credentialing the above-named process improvement methodology. To comply with Process Improvement Credentialing Standards, organizations must conduct testing which covers all body of knowledge elements below. Organizations must also comply with Process Improvement Credentialing Standards 15-point organization standard v 0.1.115 or higher. Elements do not necessarily need to be presented in the order shown below. Trainers and organizations are encouraged to teach additional information above and beyond these standards at each level.

### Body of Knowledge

1. What is DFSS
  - 1.1. DFSS Methodology
  - 1.2. Six Sigma methodology
  - 1.3. Develop new products, services, or processes
  
2. Quality Concepts
  - 2.1. Defined quality concepts
  - 2.2. Quality measures
  - 2.3. Quality defined by customers
  
3. Pareto Analysis
  - 3.1. Pareto Diagrams and Pareto Analysis
  - 3.2. Pareto principle
  
4. Six Sigma and Lean Fundamentals
  - 4.1. Lean Fundamentals
  - 4.2. Six Sigma Fundamentals
  
5. Product Development Process
  - 5.1. Product life cycle
  - 5.2. Product development process

6. DFSS Deployment Strategy
  - 6.1. Developed deployment strategy
  - 6.2. Articulate the concepts of the DFSS plan and mission
  - 6.3. Management and operations of DFSS activities
  
7. Phases
  - 7.1. Identify requirements
  - 7.2. Characterize the design
  - 7.3. Optimize the design
  - 7.4. Verify the design
  - 7.5. Objectives of each phase
  
8. Design for Six Sigma Project Algorithm
  - 8.1. The design project
  - 8.2. DFSS project algorithm
    - 8.2.1. Incorporate the Voice of the Customer
    - 8.2.2. Customer requirements
  
9. Customer Requirement Creation
  - 9.1. Identifies what the customer wants
    - 9.1.1. Normal expectations
    - 9.1.2. Exceeding expectations
  - 9.2. Model for customer retention
  
10. The Voice of the Customer
  - 10.1. Defining Voice of the Customer (VOC)
  - 10.2. Customer requirements
  - 10.3. Customer expectations – positive & negative
  
11. Design for Six Sigma Scorecards
  - 11.1. Design scorecards
  - 11.2. Proactive corrective action
  
12. Additional DFSS Processes
  - 12.1. Axiomatic Design
  - 12.2. Theory of Inventive Problem Solving (TRIZ)
  - 12.3. Failure Mode-Effect Analysis
  - 12.4. Fundamentals of Experimental Design
  - 12.5. Tolerance Design