Session 1: Introduction to DFSS (2.50 Hours)

- Design for Six Sigma Introduction
- Closing the Gap
- Better Aim Through DFSS
- Improving Lifecycle Cost
- DFSS and DMAIC
- What is Design for Six Sigma?
- The Alphabet Soup of DFSS
- Process Phase-Gates
- Design Leverage
- How To Use This Course
- Keeping Track of Where You Are
- DFSS Achievements
- Additional Practice
- Exercises and Quiz

Session 2: Define (9.05 Hours for Process/Service & 8.5 hours for Product)

- Introduction
- Project Selection Toolset
- Project Charter Toolset
- Project Tracking Toolset
- Obtaining the Voice of The Customer
- Market Segmentation
- Understanding Customer Requirements
- Listening to All the Voices
- Where to Go For Customer Requirements
- Conducting Surveys
- Survey Considerations
- Surveys - Sampling Frame
- Structuring Survey Questions

- Affinity Diagram Toolset
- CTQC Tree Diagram Toolset
- Operational Definition Toolset
- Voice Of The Customer As Specifications
- Progress Review
- Additional Practice - DEFINE
- Exercises and Quiz

Session 3: Concept (6.75 Hours)

- Introduction
- QFD Toolset
- Metrics
- The Core Principle of DFSS
- Process Capability Toolset
- Benchmarking
- Beyond Customer Requirements
- Brainstorming
- Encouraging The Creative Process
- Narrowing Down The List of Ideas
- Pugh Concept Selection Toolset
- Progress Review
- Additional Practice - CONCEPT
- Exercises and Quiz

Session 4: Design (6.75 Hours)

- Introduction
- Design Development
- Results By Design
- Design Scorecard
- Analyzing Designs
- More on QFD
- Correlation and Regression Analysis
- Multiple Regression Toolset

- Error-proofing
- FMEA Toolset
- Product and Process Reliability
- Basic Reliability Calculations
- Transfer Function Toolset
- Progress Review
- Additional Practice - DESIGN
- Exercises and Quiz

Session 5: Optimize (10.70 Hours for process/service & 19.10 hours for product)

- Introduction
- Building a Process Model
- From Process Diagram to Process Model
- Predicting Process Performance With Simulation
- Process Playground - Online Discrete Event Simulation
- Monte Carlo Toolset
- Tolerance Design & Optimization Toolset
- Optimization
- Response Surface Methods
- Optimization with Response Surface Methods
- Continuous Flow Optimization Toolset
- Design For Lean - Supply Chain Dynamics
- QFD: Building The Fourth House
- Progress Review
- Additional Practice - OPTIMIZE
- Exercises and Quiz

Session 6: Verify (3.80 Hours for process/service& 8.20 hours for product)

- Introduction
- Other Aspects of Verification

- The Process Control Plan
- Testing a Design
- Achieving Reliability Through Testing
- Robust Design and Taguchi Methods
- Minimum Run Resolution V Designs Toolset
- Robustness Testing Practice
- Piloting a Design
- Launch
- Evolutionary Operation Toolset
- Ending a Project
- Progress Review
- Additional Practice - VERIFY
- Exercises and Quiz
- Course Completion
- The Lean Six Sigma Journey