Certified Design For Six Sigma Black Belt (CDFSSBB)

Online Training and Certification Course

260 hours of Instruction covered in 80 modules

Robust Engineering and Quality excellence to enhance your career and boost your organization's bottom line

DFSS INSTITUTE

Accelerate Growth

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Training and Certification from **DFSS Institute,** is considered a mark of robust engineering and quality excellence in many industries. It helps you advance your career, and boosts your organization's bottom line through your mastery of robustness & quality skills. Becoming certified as a Certified Design for Six Sigma Black Belt (CDFSSBB) confirms your commitment to proactive quality and the positive impact it will have on your organization.

Information

Certified Design for Six Sigma Black Belt

The Certified Design For Six Sigma Black Belt is a professional who can explain Design For Six Sigma philosophies and principles, including supporting systems and tools. A Black Belt should demonstrate team leadership, understand team dynamics, and assign team member roles and responsibilities. Black Belts have a thorough understanding of all aspects of the IDDOV methodology in accordance with Design for Six Sigma principles. They have basic knowledge of robust & lean enterprise concepts, are able to identify non value-added elements and activities, and are able to use specific tools for robustness.

Examination

Each certification candidate is required to pass a web-based examination that consists of multiple-choice questions measuring comprehension of the DFSS Body of Knowledge. The Design For Six Sigma Black Belt certification examination is a 80 multiple-choice question examination.
It is offered in English and is web-based.

Certified Design For Six Sigma Black Belt (CDFSSBB) Required Experience

No experience is required to gain this certification. We will provide the training and certification.

For comprehensive training and exam information on Certified Design For Six Sigma Black Belt (CDFSSBB), visit **DFSSInstitute.com**

Body of Knowledge

Certified Design For Sigma Black Belt

Curriculum covered in the training is showed below. Three domains of knowledge are explored. Domain 1: Proactive Design for Six Sigma (IDDOV)

The exam will test only the Domain 1 information.

Class Curriculum

Start next lecture › Welcome to DFSS Institute (1 Hour) (8:05)

Course Introduction: Design for Six Sigma (21 Hours)

- Welcome to DFSS Institute (1 Hour) (8:05)
- Features and Value Propositions CDFLSSBB (4.5hours pdf) (38:54)
- Explanation of Curriculum (1 hour)
- IDDOV Methodology Overview (5.5 Hours) (30:01)
- IDDOV Case Study - Wiper Motor (3.5 Hours) (24:20)
- IDD Case Study - Terrain Select Switch (3.5 Hours) (25:06)

IDDOV Methodology/ Identify Phase: IDDOVPhase_1 (5.5 Hours)

- IDDOV Methodology/ Identifying Projects (2.5Hours pdf) (20:30)
- Function Map Diagram Tutorial with Examples (1.5 Hours)
- Customer Needs - Kano Model (1 hours) (8:57)

Defining Functional Requirements : IDDOV Phase _2 (25 Hours)

- House of Quality (HOQ) Lecture (6 Hours)
- SIPOC Tutorial (1 hour) (8:28)
- Process Excellence Tutorial with examples (1.5 Hours) (14:12)
- Process Projects Start File Demonstration Tutorial (1.5 Hours) (10:09)
- Process Project Case Study - Attitude Chart (4 Hours)
- Process Mapping Tutorial (1.5 Hours) (13:43)

- Design Work Order - Process Project Case Study (3 Hours)
- Value Stream Mapping Tutorial (3.5 Hours)
- Organization wide Planning and Deployment (1 Hour)

Develop Concept: IDDOV Phase_3 (17 Hours)

- Pugh Matrix Lecture (6 Hours)
- Axiomatic Design Lecture (1 Hours)
- TRIZ Overview Lecture (5 hours)
- Morphological Matrix Tutorial (2 Hours)
- Lean Continuous Improvement Powerpoint Template (2 Hours)

DFMEA, DVP&R, DFM/DFA IDDOV Phase 3 - Bonus Material (41 Hours)

- Design Failure Modes Effects and Analysis Tutorial (4 hours)
- DVP&R - Design Verification Planning & Reporting (12 Hours)
- DFM / DFA - Design for Manufacturing / Design for Assembly (12 Hours)
- Design for Service Engineering (3 Hours)
- Core Tools Terminology- AIAG (2 hours)
- Basic Problem Solving Techniques (8 hours)

Taguchi Design of Experiment (Dynamic Responses): IDDOV Phase_4 (30 Hours)

- Design Optimization: Transfer Functions, P-Diagrams, and Robustness Lecture (4 Hours) (30:27)
- Taguchi Dynamic DOE Case Study (3 Hours)
- Ideal Function Tutorial with Examples (4 Hours)
- Robust Optimization Planning Tutorial (10 hours)

- DFSS Institute Tools and Templates Excel - Tutorial (2 hours)
- Robust Design Strategies - Responses (1 Hour)
- Signal and Noise Strategy (4 Hours)

Robust Optimization Non-Dynamic Responses: IDDOV Phase_4 (18 Hours)

- Nominal-the-Best (NTB) Response Case Study - Knuckle (3 Hours)
- Nominal the Best (NTB) Case Study 2 - Arm Rest (3 Hours)
- Smaller-the-Better (STB) Response - ICV Overmold Case Study (3 Hours)
- Larger-the-Better (LTB) Response Case Study - Front Seat Structure (6 Hours)
- Robust Optimization for Classified Attribute Type Response Case Study (3 Hours)

Verify and Launch Phase: IDDOV Phase_5 (8 Hours)

- Verify and Launch Phase Lecture (1.5 Hours)
- Reliability Data Analysis Using Minitab - Bonus (6 Hours)

Robust Assessment, Quality Loss Function: IDDOV Phase_4 (9 Hours)

- Robust Assessment Lecture (2 Hours)
- Robust Assessment Case Study - Blow Molding (2.5 Hours)
- Tolerance Design Using Quality Loss Function Lecture (3 Hours)

Next Steps & Final Exam for Certification (13 Hours)

- Next Steps
- Final Exam for Certification (4 Hours)
- DFSS IOV Project Case Study Exercise For Certification (8 Hours)

Bonus Lectures (25 Hours)

- Orthogonal Arrays in Minitab Tutorial (1 Hour)
- Data Analysis using Minitab (5 Hours)
- Techniques to Modify Orthogonal Arrays: Dummy Treatment, Multi-level : (2 Hours)
- Weibull Analysis for Reliability Warranty Tutorial MBB Level (17 Hours)

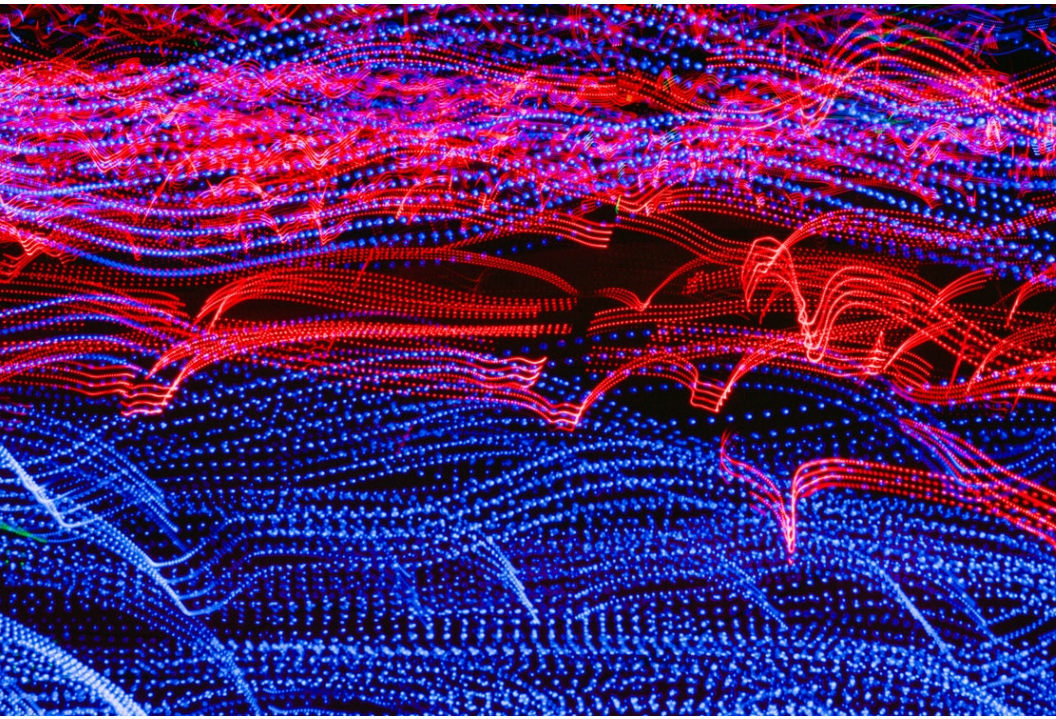
Team Dynamics, Faciliation, Organizational Skills (25 Hours)

- Team Facilitation Unit 1 (4 Hours)
- Team Facilitation Unit 2 (4 Hours)
- Being a Trainer (5 Hours)
- Coaching Winning Teams (3 Hours)
- Measuring Difficult to Measure Goals (3 Hours)

- Creating Creativity Tutorial (5.5 hours)
- Facilitative Listening (4.5 Hours)

Job Interview Success - BONUS Section (3.5 Hours)

- Typical Hiring Process (0.5 hours)
- Job Interview Questions Category 1
- Job Interview Questions Category 2
- Job Interview Questions Category 3
- Job Interview Questions Category 4
- Job Interview Questions Category 5
- Job Interview Questions Category 6



- **Remember**
  Total Course time is 260 Hours (which includes both PDF study material and video tutorials)
- The material will be available in two drip or sections. First drip is available right away with is 100 Hours of material.
- Drip 2 will be available to students after 32days of registration date.
- Drip 3 will be available after 60 days

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