

Black Belt Design for Six Sigma

Translating customer demands into first-time-right development of new robust products, services and processes. At a time of increasing pressure on time to market this new and unique Black Belt Design for Six Sigma (DfSS) training provides you with the right resources. You need these resources to successfully address challenges in development and to implement and embed this method into your organization.

Taking charge of your development project through fact-based decisions!

Register at: www.holland-innovative.nl

The aim and the result of the training

You are trained to become a professional Black Belt. This will enable you to take the lead in projects and carry them out according to the DfSS methodology. The focus on customer demands and the proactive way of gathering and evaluating data will lead to better products and an up-to-date development process. This will have a significant impact on product design, quality, reliability, company results and customer satisfaction. To increase the effectiveness of the learning process of the Six Sigma methodology and associated tools, the participants will execute their first project in sync with the training. Followed by

4x free participation in the Six Sigma User Group to assure implementation in your own project. The project has to make a significant contribution to the organization, making a fast return of investment.

A selection of the skills that are learned

You will start to work with the DfSS methodology. With the customer demands as basis the voice of the customer is translated into a clear critical to quality flowdown, the basis for the specification of your product or process. In a number of steps we come to an effective risk management (FM (M) EA) process including risk mitigation. Besides CTQ- flowdown and FM(M)EA, also creative techniques (TRIZ), preparation of experiments (DOE's), measuring system evaluations (GR&R) and reliability engineering methods will be covered. During this training we link to the book "Commercializing Great Products with Design for Six Sigma", written by Randy C. Perry and David W. Bacon. Unique in this training is the integrated approach, aiming at robust and predictable product development. Presentations are alternated with case studies and exercises. We also focus on statistical techniques for the benefit of design choices using the Minitab Statistical software program.

Target group

The course aims at professionals who execute projects for the development of new products, services and processes. Affinity with fact based decision-making supported by statistics and personal involvement in projects is preferred. The training is suitable for professionals on Academic or HBO level, or an adequate level of knowledge gained by experience.

Course duration and number of participants: 4 blocks of 3 days each, from 9.00 am to 17.30 pm.

Optional: Exam training 0.5 day.

Maximum group size: 16 participants.

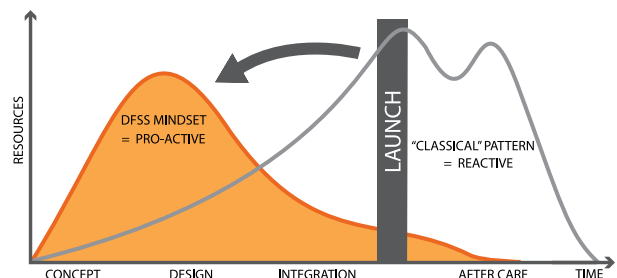
Teachers: Marcel Logger MSc., Ing. Henk van Haren, Ir. Joost van der Heijden, Dr. Ir. Remko Horne and Prof. Dr. Jeroen de Mast.

Location and costs: Location: Holland Innovative, Eindhoven / Enschede. The costs are €6.950,- (ex. VAT) per participant. Included are 12 training days, comprehensive course materials, project support during the training days, daily lunches. In addition, four times free participation in the Six Sigma User Group. Excluding costs for the optional exam training, the theoretical exam and the evaluation of the two projects that are required for the BB certification.

Dates, registration and more information: See www.holland-innovative.nl under Academy.

Contact: Team HI Academy, tel. +31 40 85 14 611, academy@holland-innovative.nl

INVESTMENT IN FRONTLOADING DESIGN FOR SIX SIGMA



- EARLY MARKET ENTRY WITH REVENUE
- CONTENT-DRIVEN ENGINEERING & LEADERSHIP
- ROBUST NEW PRODUCT: CUSTOMER DELIGHTER

- AT LEAST ONE SIGMA LOWER CAPABILITY
- TIME TO MARKET 25 - 40% SLOWER
- HIGH COST OF NON QUALITY





Teachers

Teacher, and responsible for the content of the course, is Marcel Logger MSc., Master Black Belt and Sr. Director Product- & Process development at Holland Innovative. In addition, topics will be further explained by experienced professionals of Holland Innovative.

Black Belt certification

The course is a good preparation for the certification programs of the Holland Innovative Academy:

- Two variants: Lean Six Sigma and Design for Six Sigma
- Two degrees: green belt and black belt
- Two exam components: theory exam and practical part (1 or 2 successful projects)

The requirements for certification and information about the procedure are set out in the examination regulations. Alternative certification options are the programs of the UvA and IASSC.

In four blocks complete overview and practical application:

Block 1 / day 1-3

- Introduction, with Design for Six Sigma
- DfSS project definition, business case
- DfSS requirements, voice of the customer
- Basic statistics, introduction Minitab

Block 2 / day 4-6

- Requirements and CTQ (Critical to Quality) flowdown
- Methodical design
- Lean, process mapping, risk management, FMEA, problem solving
- Process capability, DPMO, non-normal data

Block 3 / day 7-9

- TRIZ (Theory of Inventive Problem Solving)
- Data Analysis 1: hypothesis testing
- Data Analysis 2: regression analysis, non-parametric testing
- Design of Experiments 1

Block 4 / day 10-12

- Design of Experiments 2
- Robust design & tolerancing
- Design for Reliability en toepassing van DfSS tools
- Linking tools to DIDOV and DMAIC methodologies, closure



The **Holland Innovative** House: ■ ■ ■ core ■ results ■ enablers

Holland Innovative BV:

- For solutions in project management, product & process development and improvement, and reliability
- 30 professionals with an experience level of more than 20 years
- Market areas: HighTech Industry, Automotive, Solar & Energy, Healthcare, Agro & Food

