

Green Belt to Black Belt



Certified Green Belts who want to deepen their knowledge to Black Belt level in order to be able to further translate customer wishes with the new Green Belt to Black Belt training the Design for Six Sigma (DfSS) methodologies needed for the development of new robust products, services and processes. This training provides you with the means to successfully tackle challenges in development and to implement this method and embed it in your organization.

Take charge of your development projects through decision-making based on facts!

Register: www.holland-innovative.nl

Purpose of the training and result

From your background as a Green Belt you have the necessary basis to grow into a Black Belt. You are familiar with techniques such as statistics and measurement system analysis that are further explored in the Green Belt to Black Belt training.

You will be trained to be a professional Black Belt and you can take the lead within projects and implement them according to the DfSS methodology. The focus on customer demand and the proactive way of collecting and evaluating data leads to better products and an up-to-date development process for your organization. This has a significant impact on product design,

quality, reliability, operating results and customer satisfaction. In order to increase the effectiveness of the learning process of the Six Sigma methodology and the associated tools, the participants will preferably carry out an initial project in synchronization with the course, followed by 4x free participation in the Six Sigma User Group. The project must make a substantial contribution to the organization so that it justifies the investment in this course.

A selection of the skills that are learned

The DfSS method is central to the Green Belt to Black Belt. The curriculum of the Green Belt training forms the basis of this training in which, among other things, measurement system analysis is used categorically and the capability analysis is further elaborated. With the client's wish as the 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 arrive at an effective risk management (FMEA) process including risk mitigation. In addition to CTQ flowdown and FMEA, creative techniques (TRIZ), preparation of experiments (DOEs), measurement system evaluations (GR&R) and Reliability Engineering methods are also discussed. We thereby link to the book "Commercializing Great Products with Design for Six Sigma" written by Randy C. Perry and David W. Bacon. Unique to this training is the integrated approach with the aim of robust and predictable product development. Presentations will be interspersed with case studies and exercises. A lot of attention is also paid to statistical techniques for supporting design choices with the help of the statistical software program Minitab.

Course duration and number of participants 2 blocks of 3 days each and 1 block of 2 days from 9.00 to 17.00 hours. Maximum number of participants: 12. **Optional** Exam training 0.5 day.

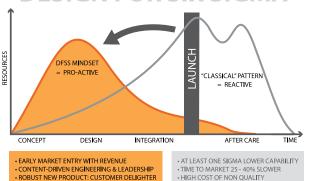
Instructors Marcel Logger MSC, Ing. Theo de Goede et al.

Location and investments Holland Innovative, Eindhoven/Enschede. The investment is € 4.650,- (ex. VAT) per participant, including the eight training days, extended course material, project support during the training days, lunch and refreshments. 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 14 610, academy@holland-innovative.nl

DESIGN FOR SIX SIGMA









Target audience

Green Belt professionals who carry out projects for the development of new products, services and processes. We expect affinity with decision-making based on facts, supported by statistics and personal involvement in projects. The training is suitable for professionals at academic or HBO level, or the same level of knowledge gained through experience.

Instructors

Intructor and responsible for the content of the training is Marcel Logger MSc., Master Black Belt en Sr. Director Product-& Procesontwikkeling bij Holland Innovative. In addition, topics are further explained by experience specialists from Holland Innovative.

Certification to black belt

The training 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 component (1 or 2 successful projects)

The requirements for certification and information about the procedure can be found in the examination regulations. Alternative certification options are the UvA and IASSC programs.

Complete overview and application in practice in 3 blocks:

Block 1 / day 1-3

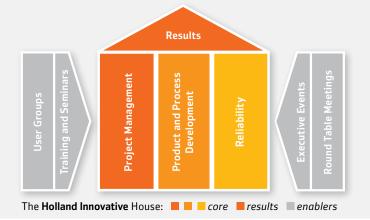
- Introduction, start with Design for Six Sigma
- DfSS Project definition, business case
- DfSS Requirements, Voice of the Customer
 - Measurement system analysis categorical,
 - Process Capability, DPMO, non-normal data
 - Data Analysis: regression analysis, non-parametric testing, transformations
 - Critical Parameter Management, methodical design, CTQ (Critical to Quality) Flowdown

Block 2 / day 4-6

- Keptner Trego, 8D, ishikawa, Shainin, Lean
 - TRIZ special
 - Process FMEA, p-diagram
- Process mapping, risk management, FMEA, problem solving
- Power and sample size
 - Design of Experiments; fractional factorial, conjoint analysis

Block 3 / day 7-8

- Reliability introduction
- Robust design & tolerancing
 - Design for Reliability and application of DfSS tools
- Connect tools to DIDOV and DMAIC methodologies, closure



Holland Innovative BV:

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

