

*Executive Master Six Sigma Green Belt
for the International Certification*

ASQ Certified Six Sigma Green Belt



ASQ - Certified Six Sigma Green Belt

Six Sigma is a fundamental approach for **reducing costs**, improving **quality**, and maintaining a **competitive** edge. Today, it is firmly established within many multi-national organizations that have successfully implemented it across their operations, achieving significant benefits (including companies such as General Electric and Caterpillar).

Six Sigma is based on the robust **DMAIC** methodology which, combined with statistical tools, identifies the root causes of problems and reduces process variation. This program, designed by Advance consultants, is based on the ASQ **Body of Knowledge** and delivers internationally recognized **Six Sigma** Green Belt best practices.





ASQ CSSGB Certification

ASQ (American Society for Quality) is a global professional association with more than 80,000 members worldwide. Its mission is to promote quality principles, share best practices, and advance the tools and methodologies available to quality professionals.

In 2006, **ASQ** launched the **Certified Six Sigma Green Belt (CSSGB)** certification, which has since been earned by more than 15,000 professionals worldwide.



Training objectives

- Understand the Six Sigma perspective on creating value for customers.
- Develop in-depth knowledge of Six Sigma principles, techniques, and tools to identify sources of waste and reduce process variation.
- Acquire the skills required to plan, manage, and execute continuous improvement projects.
- Learn the DMAIC methodology and how to apply it successfully through practical exercises and real-world case studies.
- Select and apply the most appropriate Six Sigma analysis and improvement techniques for different business scenarios.
- Follow a structured framework for delivering successful Six Sigma projects, including the organizational and cultural changes required to sustain improvements.
- Strengthen Project Management and Change Management capabilities, which are essential for leading process improvement initiatives.
- Learn from Six Sigma implementation case studies by understanding common challenges and the solutions adopted, accelerating the learning process.
- Build the knowledge and competencies required to successfully pass the ASQ Certified Six Sigma Green Belt (CSSGB) certification exam.



Detailed program

→ 1. Introduction

- Six Sigma Approach
- The DMAIC Roadmap

→ 2. Define & Measure

- DMAIC
- VOC, Affinity diagrams
- CTQ, Kano Analysis
- SIPOC
- C&E Diagram (Fishbone)
- Process Mapping
- Process Mapping Exercise
- C&E, AHP Matrix
- C&E Exercise
- Projects selection
- Metrics selection
- Continuous and discrete variables
- Measurement Systems Analysis
- Measurement Plan

→ 3. Analyze

- Select sampling plans
- Process capability (Cp, Cpk)
- Process performance (Pp, Ppk)
- DPU, DPM
- Statistics foundations
- Hypothesis Tests
- Data analysis strategy
- ANOVA
- Correlation & Linear Regression
- Exercises on statistical tests
- Design of Experiment (DOE)

→ 4. Improve & Control

- Brainstorming
- Pugh Matrix
- Control Plan
- Statistical Process Control (SPC)
- Exercises on SPC
- Team building
- Change Management
- Project Management
- Project Financial Evaluation



Practical exercises

Throughout the program, participants will complete **practical exercises** to immediately **reinforce** and **apply** the concepts presented during the sessions. They will use the key tools and techniques employed in **Six Sigma** implementations to identify sources of waste and process variation, and will work with statistical analyses performed using specialized statistical software.

In addition, real-world **Six Sigma** implementation case studies will be examined and discussed to accelerate participants' learning and help them develop practical, job-ready skills.



Who is the program for

- Managers and staff professionals working in Production, Supply Chain, Quality, Procurement, and Organizational Excellence within manufacturing and service organizations.
- Members of Six Sigma transformation or continuous improvement teams.
- Organizations planning to implement Six Sigma and seeking a structured, up-to-date training program for their employees.
- Operations and Process Improvement consultants.
- Production and Process Engineers.
- Industrialization Managers and Specialists.
- Project Managers.
- Plant Managers.



Requirements

A good understanding of the English language is required to attend the course, as both the training materials and the final examination are provided in English.



Training paths

We have designed **two training paths** for the Six Sigma Green Belt certification:

- **Classroom program:** 5 full days of training delivered over a 3-month period.
- **Live Webinar Flipped Class program:** 10 sessions of 1.5 hours each, plus 3 dedicated Q&A sessions.

In this format, participants are required to complete a pre-read of the key concepts before each session. The instructor then focuses on the most relevant topics and provides deeper insights based on the specific needs of the class.

The course includes:

- A training phase delivered either in the classroom or through Live Webinar sessions.
- An individual self-study phase supported remotely by the instructor.
- A mock certification exam followed by a review and discussion of the results.



Instructors

The course is delivered by **ASQ-certified instructors** with extensive teaching and professional experience in the Six Sigma field. The instructors from Advance School are Senior Managers with **more than 20 years of experience** in **End-to-End Supply Chain and Operations Management** within multinational companies and structured corporate environments.

Their extensive industry background enables them to share real-world experiences and successful case studies with participants, enriching the learning experience, encouraging discussion, and accelerating professional development.



Training locations

Switzerland: Basel

Italy: Milano, Bologna



Registration fees

Fees are listed on the following websites:

Trainings in SWITZERLAND: **www.advanceschool.ch**

Trainings in ITALY: **www.advanceschool.org**



Exam and Certification

At the end of the course, candidates will have the opportunity to take the Advance School internal **final exam** in a paper-and-pencil format at the Advance headquarters in Bologna.

By also taking the ASQ examination, participants can achieve the internationally recognized **CSSGB – Certified Six Sigma Green Belt certification**.

The ASQ exam is computer-based and consists of 100 multiple-choice questions to be completed within 4 hours, in English. The exam is open book, allowing candidates to bring reference books and training materials.

Requirements: 3 years of professional experience in roles involving Six Sigma, Quality, Project Management, or Lean-related activities.



In-house courses

The **In-house training** format is typically adopted when a Client requires a **training program tailored for a specific number of employees**. Advance delivers In-house courses, either on-site or through Live Webinar, throughout Switzerland and internationally, supported by its team of expert instructors.

The In-house courses offered by the school can be selected from the existing training catalogue or fully **customized according to the Client's specific needs and objectives**. An experienced consultant will conduct a detailed training needs analysis and then develop a tailored training program designed to meet the Client's goals.



How to register

To register please fill the **Enrolment Form**



COMPANY

ADVANCE is a training and consulting company with offices in Switzerland and Italy, supported by a network of Managers, Executives, and Management Consultants operating worldwide.

ADVANCE is an ASCM Premier ELITE Partner for APICS training programs.

MISSION

To develop outstanding competencies in the field of Operations Management and contribute to the success of its partners, including both organizations and professionals. To achieve this goal, ADVANCE relies exclusively on accredited training programs and instructors with proven teaching expertise and extensive professional experience.

ABOUT ASQ

A global leader in quality management, the American Society for Quality (ASQ) promotes excellence through quality. Across industries and sectors, ASQ's proven quality processes and continuous improvement resources help individuals, Fortune 500 companies, and family-owned businesses worldwide drive process improvement, ensure quality, and foster reliability and sustainability in an ever-changing marketplace.



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