



MASTERING THE IMPLEMENTATION AND MANAGEMENT OF QUANTITATIVE METHODS IN PROCESS IMPROVEMENT – SIX SIGMA BASED ON ISO 13053

SUMMARY

This five-day intensive course enables participants to develop the necessary expertise to support an organization in implementing and managing a Six Sigma process improvement based on quantitative methods of ISO 13053. Participants will also gain a thorough understanding of best practices used to implement DMAIC methodology based on requirements from ISO 13053.

DAY 2

DAY 3



WHO SHOULD ATTEND?

- ▶ Project managers or consultants willing to prepare and to support an organization in the implementation of a Six Sigma methodology
- Quality executives and/or quality engineers
- ▶ ISO 13053 auditors who wish to fully understand the Six Sigma method
- Persons responsible for the quality or conformity in an organization
- Members of a quality team
- Expert advisors in quantitative methods in process improvements
- ► Technical experts (Quality technicians, plant managers, managers of customer service, operations managers, CEOs, etc.) who want to prepare for a quality function or for a management of process improvements based on quantitative methods.

COURSE AGENDA DURATION: 5 DAYS

Introduction to management of a quantitative method in process improvement – Six Sigma concepts as required by ISO 13053

- ▶ Introduction to Six Sigma quantitative methods for process improvement
- ► Fundamental principles of Process Improvement
- Normative frameworks and methodologies related to Quantitative methods process improvement
- ► Six Sigma's relationship with Quality Management (ISO 9001)
- Understanding the requirements of ISO 13053 clause-by-clause

Definition and measurement according to Six Sigma

- Six Sigma measures
- Identification and analysis of customer needs and requirements
- ► The role of personnel in Six Sigma
- ▶ Master black belt, black belt, green belt, yellow belt

Analysis and Improvement according to Six Sigma

- Six Sigma project prioritization and selection
- DMAIC methodology
- Development of a training & awareness process

Control Six Sigma tools and techniques

- ▶ Controlling and monitoring a quantitative methods in process improvement project
- ▶ Six Sigma infrastructures within an organization
- Tools and techniques used for Six Sigma according to 13053-2
- ISO 13053 internal audit
- Preparing for a ISO 13053 certification audit

Certification Exam

DAY 5

DAY 4



LEARNING OBJECTIVES

- ► To understand the implementation and management of quantitative methods in process improvements Six Sigma in accordance with ISO 13053
- ► To gain a comprehensive understanding of the concepts, approaches, standards, methods and techniques required for the effective management of a Six Sigma process
- ► To understand the relationship between the components of Six Sigma quantitative methods in process improvement and the compliance with the requirements of different stakeholders of an organization
- ► To acquire necessary expertise to support an organization in implementing, managing and maintaining Six Sigma quantitative methods in process improvement as specified in ISO 13053-1 and ISO 13053-2
- ▶ To acquire necessary expertise to manage a team implementing ISO 13053
- ► To develop knowledge and skills required to advise organizations on best practices in the management of quantitative methods in process improvement Six Sigma
- ▶ To improve the capacity for analysis and decision making in the context of process improvement management
- ▶ To prepare an organization for an ISO 13053 audit

EXAMINATION

The "PECB Certified ISO 13053 Lead Implementer" exam fully meets the requirements of the PECB Examination and Certification Program (ECP). The exam covers the following competence domains:

Domain 1: Fundamental principles and concepts in Process improvement

Main Objective: To ensure that the ISO 13053 Lead Implementer candidate can understand, interpret and illustrate the main process improvement concepts related to quantitative methods in process improvement (Six Sigma)

Domain 2: Process improvement Control Best Practices based on ISO 13053

Main Objective: To ensure that the ISO 13053 Lead Implementer candidate can understand, interpret and provide guidance on how to implement and manage process improvement requirements based on best practices of ISO 13053

Domain 3: Planning a Six Sigma based on ISO 13053

Main Objective: To ensure that the ISO 13053 Lead Implementer candidate can plan the implementation of a Six Sigma in preparation for an ISO 13053 certification

Domain 4: Implementing a Six Sigma based on ISO 13053

Main Objective: To ensure that the ISO 13053 Lead Implementer candidate can implement the processes a Six Sigma required for an ISO 13053 certification

Domain 5: Performance evaluation, monitoring and measurement of a Six Sigma based on ISO 13053

Main Objective: To ensure that the ISO 13053 Lead Implementer candidate can evaluate, monitor and measure the performance of a Six Sigma in the context of an ISO 13053 certification

Domain 6: Continual improvement of an Six Sigma based on ISO 13053

Main Objective: To ensure that the ISO 13053 Lead Implementer candidate can provide guidance on the Continual improvement of a Six Sigma in the context of ISO 13053

Domain 7: Preparation for an audit

Main Objective: To ensure that the ISO 13053 Lead Implementer candidate can prepare and assist an organization for the certification of a Six Sigma against the ISO 13053 standard

- ► The "Certified ISO 13053 Lead Implementer" exam is available in different languages, such as English, French, Spanish and Portuguese
- Duration: 3 hours
- For more information about the exam, please visit: www.pecb.com



CERTIFICATION

- After successfully completing the exam, the participants can apply for the credentials of PECB Certified ISO 13053 Provisional Implementer, PECB Certified ISO 13053 Implementer or PECB Certified ISO 13053 Lead Implementer, depending on their level of experience
- A certificate will be issued to participants who successfully pass the exam and comply with all the other requirements related to the selected credential:

Credential	Exam	Professional Experience	Six Sigma Audit Experience	Six Sigma Project Experience	Other Requirements
PECB ISO 13053 Provisional Implementer	PECB ISO 13053 Lead Implementer Exam	None	None	None	Signing the PECB code of ethics
PECB ISO 13053 Implementer	PECB ISO 13053 Lead Implementer Exam	Two years One year of Quantitative methods in Process Improvement work experience	None	Project activities totaling 200 hours	Signing the PECB code of ethics
PECB ISO 13053 Lead Implementer	PECB ISO 13053 Lead Implementer Exam	Five years Two years of Quantitative methods in Process Improvement work experience	None	Project activities totaling 300 hours	Signing the PECB code of ethics

GENERAL INFORMATION

- Certification fees are included in the exam price
- Participant manual contains over 450 pages of information and practical examples
- ▶ A participation certificate of 31 CPD (Continuing Professional Development) credits will be issued to participants
- ▶ In case of failure of the exam, participants are allowed to retake it for free under certain conditions