



MASTERING THE AUDIT OF QUANTITATIVE METHODS IN PROCESS IMPROVEMENT – SIX SIGMA BASED ON ISO 13053, IN COMPLIANCE WITH THE REQUIREMENTS OF ISO 19011 AND ISO 17021

SUMMARY

This five-day intensive course enables participants to develop the needed expertise to audit a Six Sigma quantitative methods process improvement based on ISO 13053 and to manage a team of auditors by applying widely recognized audit principles, procedures and techniques. During this training, the participant will acquire the necessary knowledge and skills to proficiently plan and perform internal and external audits in compliance with ISO 19011 and ISO 17021. Based on practical exercises, the participant will develop the skills (mastering audit techniques) and competencies (managing audit teams and audit program, communicating with customers, conflict resolution, etc.) necessary to efficiently conduct an audit.

WHO SHOULD ATTEND?

- Internal auditors
- Auditors wanting to perform and lead Six Sigma quantitative methods in process improvement audits
- Project managers or consultants wanting to master the Six Sigma process improvement quantitative method
- ▶ Persons responsible for the quality and process improvement or conformity in an organization
- ▶ Members of a quality team or process improvement team
- Expert advisors in quantitative methods, process improvement, Six Sigma, and DMAIC methodology
- ▶ Technical experts wanting to prepare for a process improvement based on Six Sigma quantitative methods audit function

COURSE AGENDA

DURATION: 5 DAYS

Introduction to Six Sigma quantitative method in process improvement concepts as required by ISO 13053

- Normative frameworks and methodologies related to Six Sigma
- ► Fundamental principles of Quantitative Methods
- ▶ ISO 13053 certification process
- Six Sigma quantitative methods in process improvement
- Detailed presentation of the clauses of ISO 13053

Planning and initiating an ISO 13053 audit

- ► Fundamental audit concepts and principles
- Audit approach based on evidence
- ▶ Preparation of an ISO 13053 audit
- QMS documentation audit
- Conducting an opening meeting

Conducting an ISO 13053 audit

- Communication during the audit
- Audit procedures: observation, document review, interview, sampling techniques, technical verification, corroboration and evaluation
- Audit test plans
- Formulation of audit findings
- Documenting nonconformities

Concluding and ensuring the follow-up of an ISO 13053 audit

- Audit documentation
- Quality review
- Conducting a closing meeting and conclusion of an ISO 13053 audit
- Evaluation of corrective action plans
- ISO 13053 surveillance audit
- ▶ ISO 13053 internal audit management program

Certification Exam

DAY 4

DAY 1

DAY 2

DAY 3

DAY 5



LEARNING OBJECTIVES

- ▶ To acquire the expertise to perform an ISO 13053 internal audit following ISO 19011 guidelines
- ▶ To acquire the expertise to perform an ISO 13053 audit following ISO 19011 guidelines and ISO 17021 specifications.
- ▶ To acquire the expertise necessary to manage a Six Sigma audit team
- $\blacktriangleright \quad \text{To understand the operation of an ISO 13053 conformant Six Sigma quantitative methods process improvement management}$
- ► To understand the relationship between a Six Sigma quantitative methods process improvement and compliance with the requirements of different stakeholders of the organization
- ► To improve the ability to analyze the internal and external environment of an organization, and audit decision-making in the context of a Six Sigma quantitative methods process improvement management

EXAMINATION

The "PECB Certified ISO 13053 Lead Auditor" 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 Auditor candidate can understand, interpret and illustrate the main process improvement concepts related to a quantitative methods in process improvement (Six Sigma)

Domain 2: Quantitative methods in process improvement (Six Sigma)

Main Objective: To ensure that the ISO 13053 Lead Auditor candidate can understand, interpret and illustrate the main concepts and components of a quantitative methods in process improvement based on ISO 13053

Domain 3: Fundamental Audit Concepts and Principles

Main Objective: To ensure that the ISO 13053 Lead Auditor candidate can understand, interpret and apply the main concepts and principles related to a Six Sigma audit in the context of ISO 13053

Domain 4: Preparation of an ISO 13053 audit

Main Objective: To ensure that the ISO 13053 Lead Auditor candidate can prepare appropriately a Six Sigma audit in the context of ISO 13053

Domain 5: Conduct of an ISO 13053 audit

Main Objective: To ensure that the ISO 13053 Lead Auditor candidate can conduct efficiently a Six Sigma audit in the context of ISO 13053

Domain 6: Conclusion and follow-up of an ISO 13053 audit

Main Objective: To ensure that the ISO 13053 Lead Auditor candidate can conclude a Six Sigma audit and conduct follow-up activities in the context of ISO 13053

Domain 7: Management of an ISO 13053 audit program

Main Objective: To ensure that the ISO 13053 Lead Auditor understands how to establish and manage a Six Sigma audit program

- ► The "Certified ISO 13053 Lead Auditor" 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 Auditor, PECB Certified ISO 13053 Auditor or PECB Certified ISO 13053 Lead Auditor depending on their level of experience. Those credentials are available for internal and external auditors
- 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 Auditor	PECB ISO 13053 Lead Auditor Exam	None	None	None	Signing the PECB code of ethics
PECB ISO 13053 Auditor	PECB ISO 13053 Lead Auditor Exam	Two years One year of Quantitative Methods in Process Improvement work experience	Audit activities totaling 200 hours	None	Signing the PECB code of ethics
PECB ISO 13053 Auditor	PECB ISO 13053 Lead Auditor Exam	Five years Two years of Quantitative Methods in Process Improvement work experience	Audit activities totaling 300 hours	None	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