

### Training Title CERTIFIED QUALITY PROCESS ANALYST

Training Duration 5 days

#### Training Venue and Dates

REF	CERTIFIED QUALITY PROCESS		05-09 May 2025	\$5,500	Dubai,
ML099	ANALYST	5			UAE

In any of the 4 or 5-star hotels. The exact venue will be informed once finalized.

#### **Training Fees**

• \$5,500 per participant for Public Training includes Materials/Handouts, tea/coffee breaks, refreshments & Lunch.

#### **Training** Certificate

Define Management Consultancy & Training Certificate of course completion will be issued to all attendees.

#### TRAINING DESCRIPTION

The Certified Quality Process Analyst (CQPA) course is a comprehensive training program designed to equip learners with the knowledge and skills necessary to understand and apply quality process analysis within an organization.

#### **OBJECTIVES**

The course is structured into five modules, each focusing on different aspects of quality management. They will provide the Required Knowledge to become Certified Quality Process Analysts . This will also act as a preparatory course to for the participants to appear for CQPA examination conducted by ASQ.

Module 1: Quality Concepts and Team Dynamics lays the foundation with key principles such as professional conduct, ethics, quality audits, and the importance of effective team collaboration.

Module 2: Quality Tools and Process Improvement Techniques introduces process improvement methodologies and an array of quality tools essential for analysing and enhancing processes.

Module 3: Data Analysis delves into the technical aspects of data, including collection methods, statistical analysis, and the interpretation of data to drive quality improvements Module 4: Customer-Supplier Relations emphasizes the importance of managing relationships to ensure customer satisfaction and effective supplier management. Module 5: Corrective and Preventive Action (CAPA) focuses on strategies for addressing quality issues and preventing their recurrence. By completing the CQPA course, learners



will be well-prepared to contribute to quality process initiatives, leading to improved organizational performance and customer satisfaction.

#### WHAT WILL THE PARTICIPANTS LEARN?

- Successfully pass the Certified Quality Process Analyst (CQPA) exam on your first attempt with our proven and comprehensive preparatory course.
- Gain proficiency in key quality tools and techniques used in order to analyse and improve processes within your organization.
- Learn to effectively collect and analyse data to identify process improvements and ensure continuous quality enhancement.
- This course is fully aligned with the Certified Quality Process Analyst Body of Knowledge, recognized by top certification bodies.
- Boost your confidence and competence in using quality tools to drive significant improvements in your organization.
- Confidently implement proven quality management and quality engineering principles in your work areas.

#### **COURSE DURATION**

This is a 5 ( Five ) full day course This course includes:

- 35 hours of lecture plus 5 hrs of Exercises, Quiz, case studies, Examination etc.
- Downloadable resources
- Certificate of Successful completion to the participants of this preparatory Course

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#### TRAINING METHODOLOGY:

A highly interactive combination of lectures and discussion sessions will be managed to maximize the amount and quality of information and knowledge transfer. The sessions will start by raising the most relevant questions and motivate everybody to find the right answers. You will also be encouraged to raise your own questions and to share in the development of the right answers using your own analysis and experiences. Tests of multiple-choice type will be made available on a daily basis to examine the effectiveness of delivering the course. Very useful Course Materials will be given.

• 30% Lectures

DMCT/OL/9/18(Rev3Dt:23/9/18)

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- 30% Workshops and work presentation
- 20% Group Work& Practical Exercises
- 20% Videos& General Discussions

## DAILY OUTLINE

#### COURSE CONTENT

The following contents designed to cover CQPA will be covered during the course

#### Section 1: Quality Concepts and Tools (22 Questions)

- 1A Professional Conduct and Ethics
- 1B Quality Gurus
- 1B1 Quality
- 1B2 Quality Planning
- 1B3 Quality Standards Requirements and Specifications
- 1B4 Quality Documentation
- 1B5 Cost of Quality (CoQ)
- Section 1 Quiz 1 (Quality Planning and Cost)

#### 12 questions

- 1C1 Quality Audits Audit Types Part 1
- 1C1 Quality Audits Audit Types Part 2
- 1C2 Audit Components Part 1 (Audit Criteria, Purpose and Scope)
- 1C2 Audit Components Part 2 (Audit Planning and Preparation)
- 1C2 Audit Components Part 3 (Audit Opening Meeting)
- 1C2 Audit Components Part 4 (Data Collection and Interviews)
- 1C2 Audit Components Part 5 (Audit Closing Meeting)
- 1C2 Audit Components Part 6 (Audit Reporting)
- 1C2 Audit Components Part 7 (Followup and Closure)
- 1C3 Audit Roles and Responsibilities
- Section 1 Quiz 2 (Auditing)



15 questions

- 1D1 Team Dynamics Types of Teams
- 1D2 Team Development
- 1D3 Team Stages
- 1D3 Team Roles and Responsibilities
- 1D4 Team Conflicts
- **!D5** Team Dynamics Parts 1, 2 and 3
- 1E Training and Evaluation
- Section 1 Quiz 3 (Team + Ethics)

11 questions

Section 1 Slides

**Section 2 Lectures** 

Section 3 - Problem Solving and Improvement (22 Questions)39 lectures • Section 4: Customer-Supplier Relations (15 Questions)11 lectures • Section 5: Corrective and Preventive Actions (8 Questions)4 lectures •

Requirements

• Some industry experience is preferred.

Description

You can use this course for two purposes:

1. Passing the ASQ® CQPA certification exam. The course contains more than 200 practice questions.

2. Understanding and implementing Quality Engineering principles to improve an organization's performance **ww.definetraining.com** 

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#### 1. CQPA CERTIFICATION EXAM PREPARATION ( for ASQ ):

This course is fully aligned with the updated Body of Knowledge.

Sections Assigned to each section in the CQPA exam:

Section I Quality Concepts and Tools

- Section II Problem Solving and Improvement
- Section III Data Analysis



# Section IVCustomer-Supplier RelationsSection VCorrective and Preventive Action (CAPA)

# 2. LEARNING QUALITY AUDITING TO IMPROVE ORGANIZATION'S PERFORMANCE:

Training your entry-level quality assurance, inspection and quality management team members to understand the basics of quality principles and apply best practices in their work areas.

#### ELIGIBILITY

Who this course is for:

- Individuals attempting the Certified Quality Process Analyst (CQPA) exam
- Quality Managers and Directors (who want to attempt their first quality certification)
  - Other Quality Professionals interested in implementing the quality principles to improve their work processes.
  - MODE OF DELIVERY:
  - A judicious mix of class room presentations, exercises, group discussion, case studies and hands-on practice will be used. Participants will be encouraged to relate the learning to live situations
  - TRAINING INFRASTRUCTURE REQUIRED AT THE VENUE
  - LCD Projector
  - White Screen / TV Monitor
  - Flip Charts with Marker Pens
  - White Board with Marker Pens
  - Internet Facilities
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#### **COURSE PARTNER**

BMQR Certifications Pvt Ltd ., is accredited to ISO 17024 and ISO 17021 from IAF , IAS , and IPC

It has over 6000 corporate Clients. It will issue the Certificates of Completion.

### CQPA Exam Guidance Certified Quality Process Analyst ( ASQ) Topics:

DMCT/OL/9/18(Rev3Dt:23/9/18)

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Торіс	Details
I. Quality Concepts a	and Team Dynamics (20 Questions)
A. Professional	- Identify and apply behaviors that are aligned with the Code of
Conduct and Ethics	Ethics.
Conduct and Ethics B. Quality Concepts	Ethics. 1. Quality - Describe how using quality techniques to improve processes, products, and services can benefit all parts of an organization. Describe what quality means to various stakeholders (e.g., employees, organization, customers, suppliers, community) and how each can benefit from quality. (Understand) 2. Quality planning - Define a quality plan, describe its purpose for the organization as a whole, and know who has responsibility for contributing to its development. (Understand) 3. Quality standards, requirements, and specifications - Define and distinguish between national or international standards, customer requirements, and product or process specifications. (Understand) 4. Quality documentation - Identify and describe common elements of various document control systems, including configuration management. Describe the relationship between quality manuals, procedures, and work instructions. (Understand)
E.	5. Cost of quality (COQ) - Define and describe the four cost of quality categories: prevention, appraisal, internal failure, and external failure, (Understand)
C. Quality Audits	<ol> <li>Audit types</li> <li>Define and distinguish between basic audit types, including internal and external audits; product, process, and systems audits; and first-, second-, and third-party audits. (Understand)</li> <li>Audit components         <ul> <li>Identify various elements of the audit process, including audit purpose and scope, the standard to audit against, audit planning (preparation) and performance, opening and closing meetings, final audit report, and verification of corrective actions. (Understand)</li> <li>Audit roles and responsibilities</li> <li>Identify and describe the roles and responsibilities of key audit participants: lead auditor, audit team member, client, and auditee. (Understand)</li> </ul> </li> </ol>
D. Team Dynamics	<ul> <li>1 ypes of teams</li> <li>Distinguish between various types of teams: process improvement</li> </ul>



Торіс	Details
_	teams, workgroups/workcells, self-managed teams, temporary/ad hoc
	project teams, and cross-functional teams. (Analyze)
	2. Team development
	- Identify various elements in team building, such as inviting team
	members to share information about themselves during the initial
	meeting, using ice-breaker activities to enhance team membership,
	and developing a common vision and agreement on team objectives.
	(Apply)
	3. Team stages
	- Describe the classic stages of team evolution: forming, storming,
	norming, performing, and adjourning. (Understand)
	4. Team roles and responsibilities
	- Describe the roles and responsibilities of various team
at	stakeholders: sponsor, champion, facilitator, team leader, and team
	member. (Understand)
	5. Team conflict
	- Identify common group challenges, including groupthink,
	members with hidden and/or competing agendas, intentional
	distractions, and other disruptive behaviors. Describe ways of
×.	resolving these issues and keeping team members on task.
	(Understand)
	- Describe various elements of training, including linking the
1	training to organizational goals, identifying training needs, adapting
E Training and	information to meet adult learning styles, and using coaching and
E. I raining and	peer training methods. Describe various tools to measure the
Evaluation	effectiveness of the training, including post-training feedback, end-
	of-course tests, and individual and department performance
	improvement measures. (Understand)
II. Quality Tools and	Process Improvement Techniques (26 Questions)
A. Process	Define and explain elements of Plan Do Check Act (PDCA) kaizen
Improvement	- Define and explain elements of Flan-Do-Check-Act (FDCA), Raizen
Concepts and	where a control of the manufacture and break introvenent, and DWARC
Approaches	phases (define, measure, analyze, improve, control). (Appry)
	- Select, construct, apply, and interpret the seven basic quality tools:
B. Basic Quality	1) cause and effect diagrams, 2) flowcharts (process maps), 3) check
Tools	sheets, 4) Pareto charts, 5) scatter diagrams, 6) run charts and control
	charts, and 7) histograms. (Evaluate)
C. Process	1. Lean
Improvement	- Identify and apply lean concepts and tools, including set-up
Techniques	reduction (SUR), pull (including just-in-time (JIT) and kanban), 5S,



Торіс	Details
	continuous flow manufacturing (CFM), value-added analysis, value
	stream mapping, theory of constraints (TOC), poka-yoke, and total
	productive/predictive maintenance (TPM) to reduce waste in areas of
	cost, inventory, labor, and distance. (Apply)
	2. Six Sigma
	- Identify key Six Sigma concepts, including variation reduction,
	voice of the customer (VOC), belt levels (yellow, green, black, master
	black), and their roles and responsibilities. (Understand)
	3. Benchmarking
	- Define and describe this technique and how it can be used to
	support best practices. (Understand)
	4. Risk management
	- Recognize the types of risk that can occur throughout the
at	organization, such as scheduling, shipping/receiving, financials,
	operations and supply chain, employee and user safety, and
	regulatory compliance and changes. Describe risk control and
	mitigation methods: avoidance, reduction, prevention, segregation,
	and transfer. (Understand)
	5. Business process management (BPM)
24	- Define and describe this continuous process improvement practice,
	including the business process lifecycle phases (Design, Modeling,
	Execution, Monitoring, and Optimization). (Understand)
	1. Quality management tools
	- Select and apply affinity diagrams, tree diagrams, process decision
	program charts, matrix diagrams, interrelationship digraphs,
D. Management and	prioritization matrices, and activity network diagrams. (Apply)
Planning Tools	2. Project management tools
	- Select and interpret scheduling and monitoring tools, such as Gantt
	charts, program evaluation and review technique (PERT), and critical
	path method (CPM). (Apply)
III. Data Analysis (33	Questions)
	1. Basic statistics
	- Define, calculate, and interpret measures of central tendency (mean,
	median, mode) and measures of dispersion (standard deviation,
A Basic Concepts	range, variance). (Analyze)
n. Dasie Concepts	2. Basic distributions
	- Define and explain frequency distributions (normal, binomial,
	Poisson, and Weibull) and the characteristics of skewed and bimodal
	distributions. (Understand)



Торіс	Details
	3. Probability concepts
	- Describe and use probability concepts: independent and mutually
	exclusive events, combinations, permutations, additive and
	multiplicative rules, and conditional probability. Perform basic
	probability calculations. (Apply)
	4. Reliability concepts
	- Define basic reliability concepts: mean time to failure (MTTF),
	mean time between failures (MTBF), mean time between
	maintenance (MTBM), and mean time to repair (MTTR). Identify
	elements of the bathtub curve model and how they are used to
	predict failure patterns. (Remember)
	1. Measurement scales
	- Define and use nominal, ordinal, interval, and ratio measurement
at	scales. (Apply)
	2. Data types
	- Identify, define, and classify data in terms of continuous (variables)
	and discrete (attributes or counts). Determine when it is appropriate
	to convert attributes data to variables measures. (Apply)
	3. Data collection and analysis
B. Data Types, 👘 🖉	- Identify and describe the advantages of collecting and analyzing
Collection, and	real-time data. (Understand)
Integrity	4. Data integrity
	- Recognize methods that verify data validity and reliability from
	source through data analysis using various techniques such as
	auditing trails, vendor qualification, error detection software,
	training for record management, etc., to prevent and detect data
	integrity issues. (Apply)
	5. Data plotting
	- Identify the advantages and limitations of using this method to
	analyze data visually. (Understand)
	1. Sampling methods
	- Define and distinguish between various sampling methods, such as
	random, sequential, stratified, systemic/fixed sampling, rational
	subgroup sampling, and attributes and variables sampling.
C. Samulina	(Understand)
C. Sampling	2. Acceptance sampling
	- Identify and define sampling characteristics, such as lot size,
	sample size, acceptance number, and operating characteristic (OC)
	curve. Identify when to use the probability approach to acceptance
	sampling. (Understand)



Торіс	Details
D. Measurement	- Define and distinguish between accuracy, precision, repeatability
System Analysis	and reproducibility (gage R&R) studies, bias, and linearity. (Apply)
	1. Fundamental concepts
	- Distinguish between control limits and specification limits, and
	between process stability and process capability. (Apply)
	2. Rational subgroups
	- Explain and apply the principles of rational subgroups. (Apply)
	3. Control charts for attributes data
	- Identify, select, and interpret control charts (p, np, c, and u) for data
	that is measured in terms of discrete attributes or discrete counts.
	(Analyze)
E. Statistical Process	4. Control charts for variables data
Control (SPC)	- Identify, select, and interpret control charts (X-R, X-s and XmR) for
	data that is measured on a continuous scale. (Analyze)
	5. Common and special cause variation
	- Interpret various control chart patterns (runs, hugging, trends) to
	determine process control, and use SPC rules to distinguish between
	common cause and special cause variation. (Analyze)
	6. Process capability measures
	- Describe the conditions that must be met in order to measure
1	capabilit <mark>y</mark> . Calculate Cp, Cpk, Pp, and Ppk measures and interpret
	their results. (Analyze)
	1. Regression and correlation models
	- Describe how these models are used for estimation and prediction.
	(Apply)
	2. Hypothesis testing
	- Calculate confidence intervals using t tests and the z statistic and
	determine whether the result is significant. (Analyze)
	3. Design of experiments (DOE)
F. Advanced	- Define and explain basic DOE terms: response, factors, levels,
Statistical Analysis	treatment, interaction effects, randomization, error, and blocking.
	(Understand)
	4. Taguchi concepts and methods
	- Identify and describe Taguchi concepts: quality loss function,
	robustness, controllable and uncontrollable factors, and signal to
	noise ratio. (Understand)
	5. Analysis of variance (ANOVA)
	- Define key elements of ANOVAs and how the results can be used.
	(Understand)
IV. Customer-Suppl	ier Relations (13 Questions)



Торіс	Details
A. Internal and External Customers and Suppliers	- Define and distinguish between internal and external customers and suppliers. Describe their impact on products, services, and processes, and identify strategies for working with them to make improvements. (Apply)
B. Customer Satisfaction Methods	- Describe the different types of tools used to gather customer feedback: surveys, focus groups, complaint forms, and warranty analysis. Explain key elements of quality function deployment (QFD) for understanding and translating the voice of the customer. (Understand)
C. Product and Process Approval Systems	- Describe how validation and qualification methods, including beta testing, first-article, in-process, and final inspection are used to approve new or updated products, processes, and services. (Understand)
D. Supplier Management	<ol> <li>Supplier selection</li> <li>Describe and outline criteria for selecting, approving, and classifying suppliers, including internal rating programs and external certification standard requirements, including environmental/social responsibility. (Understand)</li> <li>Supplier performance</li> <li>Describe supplier performance in terms of measures such as quality (e.g., defect rates, functional performance), price, delivery speed, delivery reliability, level of service, and technical support. (Understand)</li> </ol>
E. Material Identification, Status, and Traceability	- Describe the importance of identifying material by lot, batch, source, and conformance status, including impact for recalls. Describe key requirements for preserving the identity of a product and its origin. Use various methods to segregate nonconforming material and process it according to procedures. (Apply)
V. Corrective and Pro	eventive Action (CAPA) (8 Questions)
A. Corrective Action	- Demonstrate key elements of the corrective action process: identify the problem, contain the problem, determine the root causes, propose solutions to eliminate and prevent their recurrence, verify that the solutions are implemented, and confirm their effectiveness. (Apply)
B. Preventive Action	- Demonstrate key elements of a preventive action process: track data trends and patterns, use failure mode and effects analysis (FMEA), review product and process monitoring reports, and study the process to identify potential failures, defects, or deficiencies. Improve the process by developing error/mistake-proofing methods and procedural changes, verify that the changes are made, and confirm their effectiveness. (Apply)



#### **NOTE 2 :**

**1.**The knowledge gained through this training programme can be used by the participants as preparation for ASQ exam also,

2. We state that we are not a representative of ASQ®.

3. ASQ® is the registered trademark of the American Society for Quality.

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Disclaimer: The tagline "Successfully pass the exam on the first attempt" represents an aspirational goal based on the success of past students and is not a guarantee or warranty of passing the ASQ exam. Professional certification exams demand rigorous study, understanding, and application of complex concepts. While our courses are designed to aid in clarifying these concepts and have helped many students, success in the exam ultimately depends on the individual's dedication and effort. Enrolling in our course is a step towards preparing for your exam, but it does not warrant exam success without the necessary hard work and comprehensive preparation.

NOTE: <u>Pre & Post Tests will be conducted.</u> <u>Case Studies, Group Exercises, Group Discussions, Last Day Review & Assessments will</u> <u>be carried out.</u>

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