IATF 16949 & ISO 9001 Automotive Quality Management Training Course



21 - 25 Dec 2026

Boston

7500 € (Per Person)

Ref: #ISO9066_115926

Course Introduction / Overview:

This intensive training course provides a comprehensive exploration of the strategic alignment between IATF 16949:2016 and ISO 9001:2015, the cornerstones of quality management in the global automotive industry. In an era of complex supply chains and zero-defect expectations, a robust Quality Management System (QMS) is not just a requirement but a critical competitive advantage. This program, offered by BIG BEN Training Center, is meticulously designed to move beyond simple clause interpretation, focusing instead on the practical implementation and integration of these standards to drive organizational excellence. We will delve into the process approach, risk-based thinking, and the essential automotive core tools that transform a QMS from a set of documents into a dynamic engine for continual improvement. Drawing upon established principles in the field, such as those discussed by author David Hoyle in works like the "ISO 9000 Quality Systems Handbook", participants will gain the skills to build, implement, and audit a QMS that meets stringent customer-specific requirements and fosters a culture of quality throughout the organization. This course is your definitive guide to mastering the synergies between IATF 16949 and ISO 9001 for sustained success.

Target Audience / This training course is suitable for:

- Quality Managers and Directors.
- Quality Assurance and Control Engineers.
- Internal and Supplier Auditors.
- Production and Manufacturing Managers.
- Process Engineers and Technicians.
- Supplier Quality Development Engineers.
- Management Representatives.
- Project Managers in the automotive sector.
- Individuals involved in the implementation or maintenance of an automotive QMS.

Target Sectors and Industries:

- Automotive Original Equipment Manufacturers (OEMs).
- Tier 1, Tier 2, and Tier 3 Automotive Suppliers.
- Automotive Parts and Component Manufacturing.
- Vehicle Assembly Plants.
- Engineering and Design Services for the automotive industry.
- Heat Treating, Plating, Painting and other Finishing Services.
- Governmental bodies and regulatory agencies overseeing the automotive sector.

Target Organizations Departments:

- Quality Assurance and Quality Control.
- Production and Operations Management.
- Engineering and Design (R&D).
- Procurement and Purchasing (Supplier Management).
- Internal Audit and Compliance.
- Logistics and Supply Chain Management.
- Human Resources (for competency and training management).

Course Offerings:

By the end of this course, the participants will have able to:

- Interpret the requirements of IATF 16949:2016 and its linkage with ISO 9001:2015.
- Develop and implement a Quality Management System based on the process approach.
- Apply risk-based thinking to organizational processes and QMS planning.
- Effectively utilize the core quality tools (APQP, PPAP, FMEA, SPC, MSA).
- Plan, conduct, and report internal audits according to IATF 16949 requirements.
- Manage non-conformities and implement effective corrective and preventive actions.
- Understand and address customer-specific requirements within the QMS.
- Facilitate management reviews to ensure QMS effectiveness and drive continual improvement.
- Prepare an organization for a successful third-party certification audit.

Course Methodology:

The training methodology at BIG BEN Training Center is designed to be highly interactive and participant-centered, ensuring that theoretical knowledge is immediately translated into practical skills. We move beyond traditional lectures by incorporating a dynamic blend of learning techniques. The course heavily relies on real-world case studies drawn from the automotive supply chain, allowing participants to analyze complex quality challenges and develop viable solutions. Interactive group discussions and workshops encourage peer-to-peer learning and the sharing of diverse industry experiences. A significant portion of the training is dedicated to hands-on exercises, particularly in the application of the automotive core tools like FMEA and SPC, where participants will work through practical examples. Role-playing scenarios, such as conducting an internal audit or managing a non-conformity meeting, provide a safe environment to practice and refine critical skills. Throughout the course, our expert instructors provide continuous feedback and facilitate a collaborative learning environment, ensuring every participant leaves with the confidence and competence to apply their new knowledge directly in their workplace.

Course Agenda (Course Units):

Unit One: Foundations of Automotive Quality Management

- Introduction to Quality Management Systems (QMS).
- The Seven Quality Management Principles of ISO 9001.
- Understanding the High-Level Structure (Annex SL).
- Detailed overview of ISO 9001:2015 requirements.
- Introduction to IATF 16949:2016 and its relationship with ISO 9001.
- The Process Approach and Turtle Diagrams.
- Understanding Context of the Organization and Interested Parties.

Unit Two: IATF 16949 Requirements - Leadership, Planning, and Support

- Clause 5: Leadership and Commitment, including Corporate Responsibility.
- Clause 6: Planning for the QMS, Risk-Based Thinking, and Contingency Planning.
- Clause 7: Support, including Resources, Competence, and Documented Information.
- Product Safety Requirements.
- Managing Organizational Knowledge.
- Communication Strategies within the QMS.
- Creating a robust Quality Policy and Objectives.

Unit Three: IATF 16949 Requirements - Operations

- Clause 8: Operational Planning and Control.
- Design and Development of Products and Services.
- Management of Externally Provided Processes, Products, and Services (Supplier Management).
- Production and Service Provision, including Control Plans.
- Control of Nonconforming Outputs.
- Identification and Traceability.
- Release of Products and Services.

Unit Four: The Automotive Core Tools in Practice

- Advanced Product Quality Planning (APQP) and its phases.
- Production Part Approval Process (PPAP) submission requirements.
- Failure Mode and Effects Analysis (FMEA) for design and processes.
- Statistical Process Control (SPC) for monitoring process stability.
- Measurement System Analysis (MSA) for ensuring data reliability.
- Practical workshops and exercises for each core tool.
- Integrating core tools into the overall QMS.

Unit Five: Performance Evaluation, Improvement, and Auditing

- Clause 9: Performance Evaluation, including Monitoring, Measurement, and Analysis.
- Conducting effective Management Reviews.
- Internal Audit Program Management based on IATF 16949.
- Clause 10: Improvement, Nonconformity, and Corrective Action.
- Problem-Solving Methodologies (e.g., 8D).
- Continual Improvement Strategies.
- Preparing for the IATF 16949 Certification Audit.

FAQ:

Qualifications required for registering to this course?

There are no requirements.

How long is each daily session, and what is the total number of training hours for the course?

This training course spans five days, with daily sessions ranging between 4 to 5 hours, including breaks and interactive activities, bringing the total duration to 20 - 25 training hours.

Something to think about:

What unique qualities does this course offer compared to other courses?

Reflection Question: Beyond achieving certification, how can an organization leverage the IATF 16949 framework to foster a culture of proactive innovation rather than reactive compliance?

What unique qualities does this course offer compared to other courses?

This course distinguishes itself by focusing on the strategic integration of IATF 16949 and ISO 9001, rather than treating them as a checklist for compliance. While other programs may concentrate solely on interpreting clauses, our curriculum emphasizes the "why" behind the requirements, enabling participants to build a QMS that is both compliant and a genuine driver of business performance. We dedicate significant time to the practical application of the automotive core tools through hands-on workshops, ensuring participants can immediately apply these complex methodologies in their work environments. The course is built around real-world case studies that reflect the current challenges of the automotive supply chain, from managing supplier risk to addressing new technology integration. Our approach is holistic, connecting the dots between leadership commitment, operational control, and continual improvement. We cultivate a deep understanding of how a well-implemented QMS can reduce waste, improve efficiency, and ultimately enhance product quality and customer satisfaction, providing a strategic advantage that goes far beyond the certificate on the wall.