

## CFE©ERT

## ISO/SAE 21434 Road Vehicles Cyber Security Engineering Awareness Course



ISO/SAE 21434, a leading cybersecurity engineering standard, comprehensively addresses every facet of a connected vehicle's journey, from inception to decommissioning. This standard encompasses all electrical/electronic systems, components, software within vehicles, and their external interfaces. As the sole cybersecurity engineering standard in the automotive industry, ISO/SAE 21434 provides a comprehensive framework for implementing security measures, safeguarding the entire vehicle lifecycle, and spanning the complete supply chain.

Our training program is your gateway to understanding the intricacies of cybersecurity threats and the specifics of ISO/SAE 21434, tailored for highway vehicles. Dive into the realm of automotive cybersecurity, equip yourself with vital knowledge, and fortify your expertise in securing vehicles for the modern age.

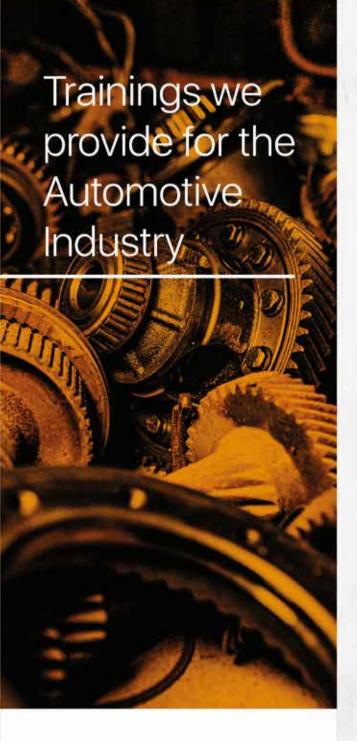
## ISO/SAE 21434 Road Vehicles Cyber Security Engineering Internal Auditor Course



The standard is meticulously crafted to seamlessly integrate with other pivotal automotive safety and quality standards, including ISO 26262 (Functional Safety for Road Vehicles) and ISO 9001 (Quality Management Systems). It establishes a systematic approach to cybersecurity within the automotive sector, aligning harmoniously with the principles outlined in the ISO/IEC 27000 series on Information Security Management Systems.

ISO/SAE 21434 comprehensively addresses various facets of cybersecurity engineering for road vehicles, encompassing critical areas such as risk assessment, threat analysis, vulnerability evaluation, cybersecurity verification, and validation processes. By adhering to the recommendations and requirements of this standard, automotive manufacturers and suppliers can significantly bolster the cybersecurity resilience of their vehicles across the entirety of the development lifecycle.

Our course provides invaluable insights, offering practical tips and best practices for the effective implementation of this standard.



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## ISO/SAE 21434 Road Vehicles Cyber Security Engineering Lead Auditor Course



ISO/SAE 21434 is a standard that guides the inclusion of cybersecurity in the development of road vehicles. It addresses the growing concerns surrounding cybersecurity threats in modern vehicles, particularly as they become more connected and autonomous. The standard covers key aspects of cybersecurity engineering for road vehicles, including risk assessment, threat analysis, vulnerability evaluation, cybersecurity verification, and validation processes. By adhering to the recommendations and requirements of this standard, automotive manufacturers and suppliers can strengthen their vehicles' cybersecurity across the entire development cycle.

Join our 5-day lead auditor training program to gain comprehensive insights into preparing, planning, and conducting audits in line with audit principles.

## **TPM - Total Productive Maintenance Course in Automotive**

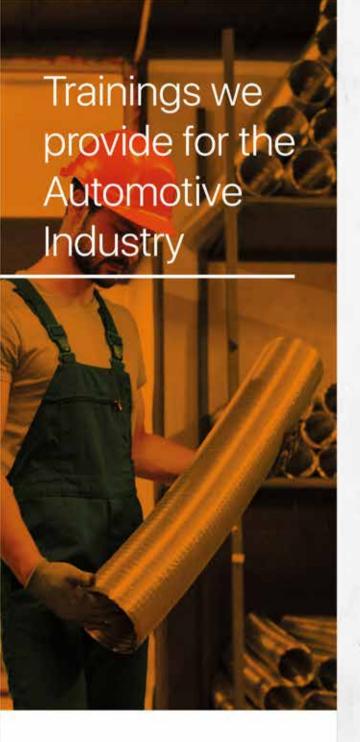


Elevate your organization's manufacturing prowess and attain operational excellence with our TPM (Total Productive Maintenance) Course in Automotive. This specialized program empowers participants with vital skills for the proficient application of TPM principles, enabling them to maximize automotive production efficiency, boost equipment reliability, minimize downtime, and elevate productivity within the automotive sector, ultimately optimizing the entire production process.

#### SA 8000:2014 Social Responsibility Standard Internal Auditor Course



Promote social responsibility with our SA 8000:2014 Social Responsibility Standard Internal Auditor Course. This specialized training equips participants with the skills to conduct effective audits of social responsibility management systems. Learn to assess compliance with SA 8000 requirements, identify improvement opportunities, and ensure ethical practices in organizations. Strengthen your commitment to social responsibility and ethical business practices.





## TISAX Automotive Information Security Management Awareness Course



TISAX is an evaluation and change mechanism specifically designed for the automotive industry, based on the Information Security Assessment (ISA) criteria developed by the German Automotive Industry Association (VDA). Increasingly empowered in the automotive supply chain, TISAX ensures mutual acceptance of Information Security Assessments in the automotive industry and creates a common assessment and exchange mechanism.

This one-day training aims to provide you information about the basis of the standard.

## IATF 16949 Automotive Quality Management System Awareness Course



The globally recognized IATF 16949 standard sets the essential guidelines for quality management systems in companies engaged in automotive manufacturing, services, and accessories. Our training is designed to equip participants with a comprehensive understanding of the IATF 16949 standard, encompassing its historical context, structural components, incorporation of customer-specific requirements, and the significance of the process approach within the automotive industry. Our goal is to ensure that participants gain the knowledge necessary to navigate and implement the IATF 16949 standard effectively.

## IATF 16949 Automotive Quality Management System Internal Auditor Course



Our training program is designed to develop the skills necessary for evaluating and reporting on the appropriateness and effective implementation of processes according to IATF 16949 standards. We aim to provide our participants with the knowledge required to initiate the audit, plan and conduct audit activities, prepare and distribute audit reports, and carry out follow-up activities. Additionally, we emphasize the significance of these skills in ensuring compliance and facilitating continuous improvement in quality and processes.

# Trainings we provide for the Automotive Industry





## Statistical Process Control (SPC)



Statistical Process Control (SPC) is a quality control method employed in manufacturing and various industries to oversee and regulate processes, maintaining their stability and ensuring consistent, predictable outcomes. SPC employs statistical techniques to scrutinize and quantify process variations, recognizing patterns or trends that might result in defects or deviations from desired standards.

In essence, SPC is a potent tool for securing process stability and consistency, ultimately enhancing product quality, diminishing waste, and boosting efficiency in manufacturing and other sectors.

Our course intends to raise participants' awareness of basic statistics, statistical process control, and process capability analysis. These analyses aim to help organizations establish a system that minimizes product-process variability and detects nonconformities in advance.

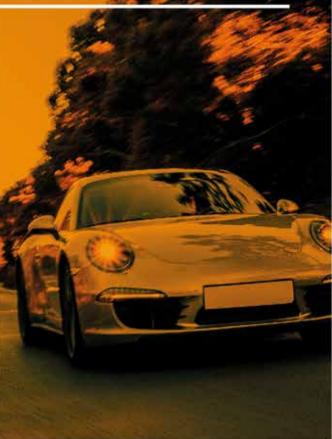
## Failure Mode and Effects Analysis (AIAG-VDA-FMEA)



Failure Mode and Effects Analysis (FMEA) is a systematic and forward-looking risk assessment technique utilized in diverse industries like automotive, manufacturing, aerospace, and healthcare. Its purpose is to uncover potential failure modes within a system, product, or process and assess their possible impact on performance and safety. FMEA is an invaluable tool for managing risk, improving quality, and enhancing product/process design. The AIAG-VDA-FMEA approach aims to boost the overall effectiveness and efficiency of FMEA while promoting consistent practices and communication in the automotive industry.

Our training is designed to elucidate the methods for planning and implementing necessary precautions by analyzing the effects and critical risks of errors that can occur in both design and the process. It is based on the latest version of the FMEA 5 booklet.

# Trainings we provide for the Automotive Industry





### Process Failure Mode and Effects Analysis (PFMEA)



Process Failure Mode and Effects Analysis (PFMEA) is a systematic risk assessment tool for pinpointing and evaluating potential failures in a manufacturing or process-oriented system. It's a critical part of the broader Failure Mode and Effects Analysis (FMEA) approach, with a specific focus on process-related failure modes and their effects.

PFMEA finds application across diverse industries, including manufacturing, automotive, aerospace, healthcare, and more, helping organizations enhance process reliability, product quality, and overall operational efficiency by addressing potential process-related risks and vulnerabilities.

Our course aims to explain the methods for planning and implementing necessary precautions by analyzing the causes or potential sources of errors within a process, their effects, and the critical risks associated with them.

### Design Failure Mode and Effects Analysis (DFMEA)

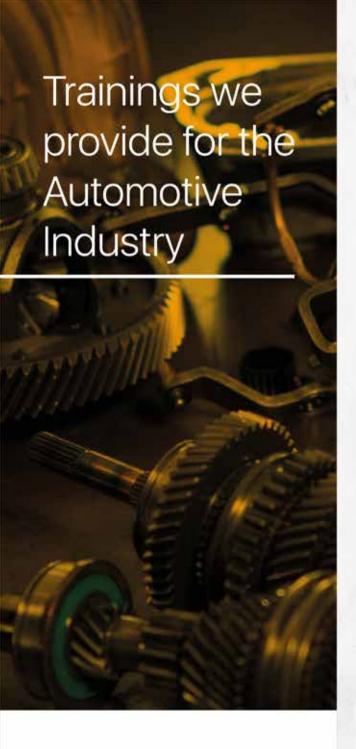


Design Failure Mode and Effects Analysis (DFMEA) is a systematic risk assessment tool for identifying and evaluating potential design-related failure modes in product development. It's a crucial part of the broader Failure Mode and Effects Analysis (FMEA) approach, with a specific focus on product design.

DFMEA involves a cross-functional team of experts, including design engineers, subject matter specialists, and quality engineers, to uncover and mitigate design weaknesses and risks before production. This process enhances product reliability, quality, and customer satisfaction by addressing issues at the design stage.

DFMEA is widely applied in industries like automotive, aerospace, consumer electronics, and medical devices to proactively manage design-related risks and ensure products meet performance and safety standards.

Our course aims to explain how to plan and implement necessary precautions by analyzing the effects and critical risks of design errors, covering methods for addressing or preventing these issues.





## Advanced Product Quality Planning (APQP) and Production Part Approval Process (PPAP)



Advanced Product Quality Planning (APQP) and Production Part Approval Process (PPAP) are vital methodologies in the automotive sector, ensuring products are developed, manufactured, and delivered at the highest quality and reliability standards.

These two methods are integral to a robust automotive quality management system. They ensure that new products prioritize quality and that production processes consistently meet customer and regulatory standards. APQP and PPAP foster collaboration between customers and suppliers, ultimately enhancing customer satisfaction and product reliability.

Our course aims to cover the entire process, from receiving a customer's demand to launching mass production, following the IATF 16949 Technical Specification and customer-specific requirements from major industry players. It includes the format and content of the automotive industry's control plan, as well as the new product approval process and its content.

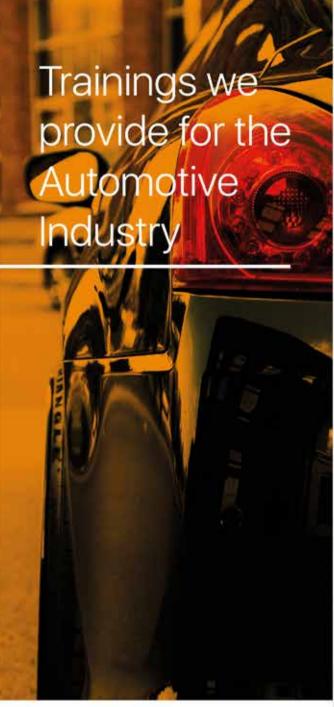
### Measurement Systems Analysis (MSA)



Measurement Systems Analysis (MSA) is a vital technique for assessing the reliability and accuracy of measurement systems. It plays a critical role in quality management, as precise measurements are essential for informed decision-making, process enhancement, and product quality assurance.

MSA finds application across diverse industries such as manufacturing, automotive, aerospace, healthcare, and research, ensuring the reliability and accuracy of measurement systems to support process improvement, quality control, and meeting customer needs. By enhancing measurement system capabilities, organizations can reduce errors, make better decisions, and boost overall process performance.

Our course aims to provide a structured overview of the method for evaluating measurement system quality.



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## Global 8D and Effective Problem Solving Techniques



Global 8D and Effective Problem Solving Techniques are structured approaches for organizations to tackle complex problems, especially in quality and process improvement. They aid teams in pinpointing root causes, crafting solutions, and preventing issue recurrence. These problem-solving methods are versatile and applicable to various challenges across industries, whether small process hiccups or large-scale organizational issues. Utilizing Global 8D and effective problem-solving techniques enables organizations to systematically address problems, enhancing decision-making, processes, and overall performance.

### IATF's Automotive Process Management Model

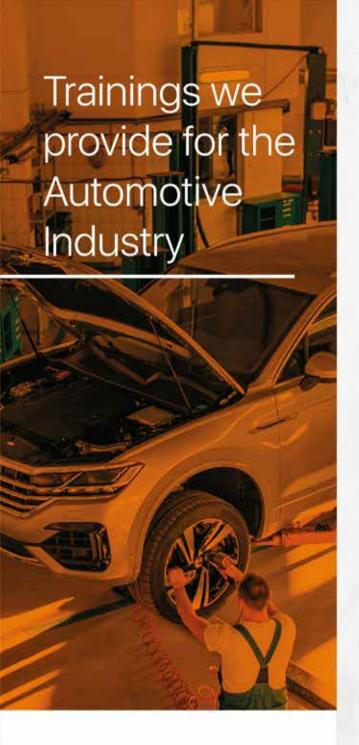


Understand IATF 16949, the quality management standard tailored for the automotive industry. Our training covers the ISO 9001:2015 integration and automotive-specific requirements, emphasizing a process-oriented approach for consistent product quality and customer satisfaction. Join our training to embrace the importance of a process-oriented approach to managing quality in the automotive sector.

#### Total Efficient Maintenance



Optimize maintenance practices with Total Efficient Maintenance (TEM), a proactive strategy focused on enhancing equipment reliability, minimizing downtime, and reducing maintenance costs. Join our course to minimize losses, maximize production system efficiency, and achieve operational excellence. The standard aims to better the capabilities of organisations and fills the need for organizations to define, implement, and maintain robust processes that ensure consistent product quality and customer satisfaction. These processes encompass various aspects, such as product design and development, production, supplier management, risk assessment, and continuous improvement.



## Change and Continuous Improvement (Kaizen)



Embrace Change and Continuous Improvement, including the Kaizen philosophy, in the realm of quality management and process enhancement. Discover how effective change management, along with continuous improvement, can drive transformative, sustainable improvements within your organization, ensuring adaptability and competitiveness in a dynamic business environment, in our one-day training.





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