TRIGO
Global Quality Solutions

GLOBAL
TRAINING SERVICES

QUALITY MANAGEMENT SYSTEMS TRAINING

QUALITY AND PRODUCTIVITY IMPROVEMENT

eLEARNING

SUPPLIER DEVELOPMENT PROGRAM

TRIGO EXPERTS FOR QUALITY / ABOUT TRIGO GROUP

ICON LEGEND (Symbol denotes industry)

 General

 Automotive

 Aerospace

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TRIGO
Global Quality Solutions

EXEMPLAR GLOBAL RECOGNIZED TRAINING PROVIDER

As of January 1st, 2020, TRIGO Group is recognized by Exemplar Global as a Certified Training Provider.

Why is this important for customers? The Exemplar Global certification adds immense credibility to the courses we offer. Anyone can set up shop as a training provider, but not every training organization can successfully complete the thorough approval process that Exemplar Global conducts. Because Exemplar Global is well-known and respected, customers can have the confidence they will take part in high-quality training programs also valid for future employees. In addition, employers enrolling members to training courses often ask about certification opportunities. For auditors, it is often asked during the job application process if they took part in a certified training course like Exemplar Global.

As for the Recognized Training Provider program, the method of certification sets TRIGO apart from those who haven't adopted the new offering. Thanks to the benefits we offer, attendees can expect to further their professional development with access to Exemplar Global free virtual expos, webinars, and the 12 months of continued education available to them.

The Work Style Assessment provided offers them unique insights into their personal and professional attributes. This helps with understanding strengths and weaknesses in the auditing world. The RTP benefits also include access to job listings and a resume database available to CBs and others hiring auditors. Finally, attendees benefit professionally from attaining a personnel certification. And to help them secure personnel certification in the future, Exemplar Global recognized the training course they took with TRIGO as meeting their training criteria if they elect to pursue that.

In summary, training provider certification is important for establishing credibility. In addition, the Recognized Training Provider certification program provides unique benefits that will help your students grow professionally.

"We don't read slides, we teach from experience."

Robert W. MUIR
Director Global Training Services, TRIGO Group

FOREWORD

We, at TRIGO, provide Quality Training, Consulting and Auditing services to many industries worldwide by our dedicated business unit. Training is available through seminars, onsite workshops and online courses on four continents by professionals, including subject matter experts, consultants and specialists.

Supplier training is an essential part of TRIGO's comprehensive supplier development program, including consulting and auditing services that specifically address customers' quality concerns.

With over 30+ years of experience in variety of industries, we help improve manufacturing processes by providing the necessary training that specifically addresses our clients quality concerns. Our comprehensive range of training services include international standards, customer specific requirements, technology based and on-demand training that meet and/or exceed customer expectations.

Contact us for more information and let TRIGO assist you with training needs.
training@trigo-group.com

"Behind every TRIGO training course, there are specific methodologies for an efficient quality and business management tool to improve your organization's operation."

Zsolt PUSKÁS
Executive Vice President of TREQ Division

INDUSTRY KNOWLEDGE AT ITS BEST

Efficient training services can only be offered with great experience!

Our philosophy at TRIGO is simple – we believe effective training demonstrates its value well after our students leave a TRIGO workshop or seminar. Our hands-on and proven techniques instill easy-to-learn concepts for every day work situations.

TRIGO maintains over 30+ years of experience delivering Quality Training and Consulting services globally for many manufacturers and suppliers throughout the automotive, aerospace and general manufacturing sectors. Our trainers are carefully selected with years of experience in a variety of industries, providing their intimate knowledge of various products, services and operational processes. All course material is carefully constructed by our master trainers with the latest industry standards that align seamlessly with our customers daily practices or quality needs. To maximize the value of TRIGO's Training Services, we recommend complementing it with an Onsite Workshop, where your shop floor becomes the classroom, and knowledge transfer is provided first hand.

All training courses listed within this catalogue are available as Onsite Workshops, however, there are a large number of courses that are delivered as Public Seminars or digitally through our e-learning module. No matter the avenue of training you prefer, all completed courses award each student with a personalized certificate upon completion.

"TRIGO as a quality service provider is constantly learning and integrating the experience of everyday life into its projects. We share with our partners in progression and self-development."

Matthieu RAMBAUD
Chief Executive Officer

QUALITY MANAGEMENT SYSTEMS TRAINING

ISO 9001:2015 INTERNAL AUDITOR*

CERTIFICATE: All attendees receive an official certificate upon successful completion of the course.

INDUSTRY: General DURATION: 3 Days

This course is designed to discuss all types of audits, assessments and show participants how to be most effective in these activities. Case studies, interactive learning, teamwork, role-playing and lectures are all used to instruct in the techniques and methods that can be used to ensure a successful assessment.

OUTLINE OF TOPICS COVERED

- ISO 9001:2015 Auditor's perspective
- Principles of Auditing
  - Internal Auditing Techniques
  - Auditing Practices
- Quality Manuals, Systems and Documentation
  - What must be included
  - Acceptable formats
  - Monitoring Quality Management Systems
- Planning, Performing and Audit
  - Pre-Audit Planning
  - The Process Approach
  - Developing Checklists
  - Reporting your Findings
  - Corrective Action Requests
  - Noncompliance and Nonconformance
  - Taking Corrective Action
- Role Playing
- Examination

WHO SHOULD ATTEND?

- Individuals interested in pursuing Internal Auditor certification.
- Those responsible for developing and managing supplier accreditation programs.
- Participants are assessed by the following two methods - Continuous Evaluation and Written Examination.

PREREQUISITES

A working knowledge of ISO 9001:2015 and past audit experience.

*This course is available in the Exemplar Global Certified format.

ISO 9001:2015 LEAD AUDITOR*

CERTIFICATE: All attendees receive an official certificate upon successful completion of the course.

INDUSTRY: General DURATION: 5 Days

This course is designed to discuss all types of audits, assessments and show participants how to be most effective in these activities. Case studies, interactive learning, teamwork, role-playing and lectures are all used to instruct in the techniques and methods that can be used to ensure a successful assessment.

OUTLINE OF TOPICS COVERED

- ISO 9001:2015 – Auditor's perspective
  - Changes from 2008
- Principles of Auditing
  - Internal Auditing Techniques
  - Auditing Practices
- The Managerial Role of the Lead Auditor
  - Selecting and preparing your Auditors
  - Directing the efforts of the Auditing Team
- Quality Manuals, Systems and Documentation
  - What must be included
  - Acceptable formats
  - Monitoring Quality Management Systems
- Planning, Performing and Audit
  - Pre-Audit Planning
  - The Process Approach
  - Developing Checklists
  - Reporting your Findings
  - Corrective Action Requests
  - Noncompliance and Nonconformance
  - Taking Corrective Action
- Auditing Design, Research, and Development Functions
- Auditing Service Functions
- Written Examination

BENEFITS OF ATTENDING

- Manage audit programs within your organization, including the internal audit program, corporate audits and supplier quality system development. You will learn the characteristics of a professional auditor, which will enable you to better recruit and evaluate auditors under your direction.
- "Successful Completion" satisfies the training requirements for individual auditor certification by Exemplar Global.

WHO SHOULD ATTEND?

- Individuals interested in pursuing Auditor, Lead Auditor certification.
- Those responsible for developing and managing supplier accreditation programs.

PREREQUISITES

- Internal Auditor - suggested
- A working knowledge of ISO 9001:2015 and past audit experience.

*This course is available in the Exemplar Global Certified format.

IATF 16949:2016 INTERNAL AUDITOR*

CERTIFICATE: All attendees receive an official certificate upon successful completion of the course.

INDUSTRY: General DURATION: 3 Days

This course is designed to discuss all types of audits, assessments and show participants how to be most effective in these activities. Case studies, interactive learning, teamwork, role-playing and lectures are all used to instruct in the techniques and methods that can be used to ensure a successful assessment.

OUTLINE OF TOPICS COVERED

- ISO 9001:2015/IATF 16949:2016 – Auditor's perspective
- Principles of Auditing
  - Internal Auditing Techniques
  - Auditing Practices
- Quality Manuals, Systems and Documentation
  - What must be included
  - Acceptable formats
  - Monitoring Quality Management Systems
- Planning, Performing and Audit
  - Pre-Audit Planning
  - The Process Approach
  - Developing Checklists
  - Reporting your Findings
  - Corrective Action Requests
  - Noncompliance and Nonconformance
  - Taking Corrective Action
- Role Playing
- Examination

BENEFITS OF ATTENDING

Manage audit programs within your organization, including the internal audit program, corporate audits and supplier quality system development. You will learn the characteristics of a professional auditor, which will enable you to better recruit and evaluate auditors under your direction.

WHO SHOULD ATTEND?

- Individuals interested in pursuing Internal Auditor certification.
- Those responsible for developing and managing supplier accreditation programs.
- Participants are assessed by the following two methods - Continuous Evaluation and Written Examination

PREREQUISITES

A working knowledge of ISO 9001:2015/IATF 16949:2016 and past audit experience.

*This course is available in the Exemplar Global Certified format.

IATF 16949:2016 LEAD AUDITOR*

CERTIFICATE: All attendees receive an official certificate upon successful completion of the course.

INDUSTRY: Automotive DURATION: 5 Days

This course is designed to discuss all types of audits, assessments and show participants how to be most effective in these activities. Case studies, interactive learning, teamwork, role-playing and lectures are all used to instruct in the techniques and methods that can be used to ensure a successful assessment.

OUTLINE OF TOPICS COVERED

- ISO 9001:2015/IATF 16949:2016 – Auditor's perspective
  - Changes from 2008
- Principles of Auditing
  - Internal Auditing Techniques
  - Auditing Practices
- The Managerial Role of the Lead Auditor
  - Selecting and preparing your Auditors
  - Directing the efforts of the Auditing Team
- Quality Manuals, Systems and Documentation
  - What must be included
  - Acceptable formats
  - Monitoring Quality Management Systems
- Planning, Performing and Audit
  - Pre-Audit Planning
  - The Process Approach
  - Developing Checklists
  - Reporting your Findings
  - Corrective Action Requests
  - Noncompliance and Nonconformance
  - Taking Corrective Action
- Auditing Design, Research, and Development Functions
- Auditing Service Functions
- Written Examination

BENEFITS OF ATTENDING

- Manage audit programs within your organization, including the internal audit program, corporate audits and supplier quality system development. You will learn the characteristics of a professional auditor, which will enable you to better recruit and evaluate auditors under your direction.
- "Successful Completion" satisfies the training requirements for individual auditor certification by Exemplar Global.

WHO SHOULD ATTEND?

- Individuals interested in pursuing Auditor, Lead Auditor certification.
- Those responsible for developing and managing supplier accreditation programs.

PREREQUISITES

ISO 9001:2015 Internal Auditor with Emphasis on IATF 16949:2016.

*This course is available in the Exemplar Global Certified format.

AUTOMOTIVE CORE TOOLS FOR AUDITORS

CERTIFICATE: All attendees receive an official certificate upon successful completion of the course.

INDUSTRY: Automotive DURATION: 2 Days

This course meets the customer specific requirements of Ford, FCA and GM, for the qualification of Internal Auditors. Participants in this course will be trained in related core tools (e.g. APQP, SPC, MSA, FMEA, and PPAP), and the automotive process approach to auditing. As part of the training, participants will participate in practice sessions, including case study audits and/or auditing role plays/simulations and/or on-site audits.

OUTLINE OF TOPICS COVERED

DAY 1

- Introduction
- APQP – Define the Scope
- APQP – Phase 1: Plan and Define
- APQP – Phase 2: Product Design & Development
- FMEA – Design Failure Mode & Effects Analysis
- APQP – Phase 3: Process Design & Development
- Process Flow Diagrams
- FMEA – Process Failure Mode & Effects Analysis
- PFMEA Workshop
- APQP – Phase 4: Product & Process Validation
- MSA – Measurement System Analysis
- MSA – Bias, Stability, Linearity, Repeatability, Reproducibility

DAY 2

- SPC – Statistical Process Control
- SPC – Initial Process Studies, Histograms, Statistical Distributions, Variable Control Charts, Statistical Capability
- PPAP – Production Part Approval Process
- Control Plans
- Control Plan Workshop
- APQP – Phase 5: Feedback, Assessment & Corrective Action
- Process Approach to Auditing
- Process Auditing Workshop
- Exam

BENEFITS OF ATTENDING

Allows internal auditors to not only verify the implementation of the quality management system processes, but determine their effectiveness.

WHO SHOULD ATTEND?

Internal auditors who work for tier 1, 2 and 3 suppliers pursuing or registered to IATF 16949:2016.

PREREQUISITE

Participants in this course must be an auditor, or have taken a 3-day internal auditor course.

EN 9100:2016 REQUIREMENTS

CERTIFICATE: All attendees receive an official certificate upon successful completion of the course.

INDUSTRY: Aerospace DURATION: 2 Days

This thorough course will provide the essential knowledge of EN 9100:2016 and its requirements, supplemented with the assessment of related current practices and the exploration of possible needs for change and development.

OUTLINE OF TOPICS COVERED

- The 2016-version of the EN 9100 standard
- The concept of Quality Management System and its links to the Standard
- Requirements related to activities with added value
- Requirements related to support activities
- Requirements related to the management of the Company's activities
- Requirements related to the setting up of the Company's QMS
- Analysis of the management and control of the Company's processes
- Ways to improve
- Exam

BENEFITS OF ATTENDING

- Participants will understand the requirements of the standard, but especially its usefulness and interest for their own company, as well as the way they can/must really use it.
- During the training, everyone will have to evaluate their current practices in regard to the standard requirements and to draw the opportunities for improvement or the needs for evolution.

WHO SHOULD ATTEND?

New Employees, Process Owners, Internal Auditors, and Management Teams.

PREREQUISITES

None

AS9100D:2016 INTERNAL AUDITOR

CERTIFICATE: All attendees receive an official certificate upon successful completion of the course.

INDUSTRY: Aerospace DURATION: 3 Days

How to survey and troubleshoot your operation for conformance to AS9100D:2016? Without preparation, including audit, corrective actions and follow up, it is always hard to get ready to be certified or re-certified. By having an internal auditor completely dedicated to your company and knowing your processes and standards, you will be capable to detect problems upstream and implement corrective actions for a continuous improvement. The internal auditor keeps track on your customer's requirements, efficiently managing your Quality levels all along the supply chain while reassuring your customer. Our training covers the audit phases of planning, execution and follow-up, in detail. Every effort has been made to distinguish the role of an internal auditor versus a third party auditor. You will be shown how to tactfully utilize auditing techniques in your own full-time work environment.

OUTLINE OF TOPICS COVERED

- Introduction and Objectives
  - What is auditing
  - Purposes/Scope of an audit
  - Assessment types and roles
  - Audit types and categories
- AS9100D:2016 Standard
  - AS9100 Key changes and other key emphasis
  - Key Definitions
  - The 10 sections (from the auditor's perspective)
- The Audit Cycle
- Desk Study
  - Purpose
  - Documents
- Checklists
  - Purpose
  - Content
  - Good versus bad questions
- Audit Planning
  - Information required
  - Formats
- Executing The Audit
  - Opening Meeting
  - Collecting objective evidence
  - Obstacles
  - Recording observations
  - Categories of Nonconformance
- Closing Meeting
  - Contents
  - Strategies
- The Audit Report
  - Purpose
  - Content
- Corrective Action/Follow-up
  - Responsibilities
  - CAR Completion
  - Follow-up reports

BENEFITS OF ATTENDING

- It will assist organizations wishing to become registered to AS9100D:2016 by identifying the elements that an external auditor will cover.
- This course will allow an organization to qualify their internal auditors to conduct both first party and second party audits of their own facility as well as sister facilities and suppliers. Auditors will not only learn how to ensure that the system is implemented as written, but also to determine if it is effective and to identify opportunities for continual improvement.

WHO SHOULD ATTEND?

Individuals who will manage, conduct or participate in internal audits.

PREREQUISITES

Participants will benefit from having exposure to AS9100D:2016 prior to the training, however it is not mandatory.

ISO 45001:2018 INTRODUCTION AND BEST PRACTICES

CERTIFICATE: All attendees receive an official certificate upon successful completion of the course.

INDUSTRY: General DURATION: 2 Days

ISO 45001:2018 is particularly significant as a result of fundamental changes to both structure and its contents, compared to OHSAS 18001. Complying with the revised requirements will present new challenges for Health and Safety Managers and implementation teams. This introductory session will guide attendees through the changes between ISO 45001:2018 and OHSAS 18001:2007, including the adoption of Annex SL, the framework for a generic management system. In addition, we will provide strategies to transition your OH&S management system to conform to the new standard.

OUTLINE OF TOPICS COVERED

- Intention behind ISO 45001
- Navigating the New High Level Structure
- Changes between the two standards, grouped into key concepts:
  - Context of the Organization
  - Planning for Risks
  - Leadership
  - Change Management
  - Control of Externally Provided Products and Services
  - Awareness and Documented Information
- Best Practices for Implementation
- Personal Action Plans for your Company

BENEFITS OF ATTENDING

This introductory session will guide attendees through the changes between ISO 45001:2018 and OHSAS 18001:2007, including the adoption of Annex SL, the framework for a generic management system. In addition, we will provide strategies to transition your OH&S management system to conform to the new standard.

WHO SHOULD ATTEND?

Health and Safety Managers, and Management teams.

PREREQUISITES

A general understanding of the OHSAS 18001 standard is a recommended prerequisite.

ISO 14001:2015 INTERNAL AUDITOR

CERTIFICATE: All attendees receive an official certificate upon successful completion of the course.

INDUSTRY: General DURATION: 2 Days

This course is for manufacturing and service businesses. It teaches you how to audit and troubleshoot your own operation for compliance to the ISO 14001:2015 standard. The audit phases of planning, execution, and follow-up are covered in detail. Case studies and workshops, simulating actual audit situations, are used to practice auditing skills. This course covers the guidelines published for audit planning, conducting and reporting. Participants will be shown how to tactfully utilize auditing techniques in their own full-time work environment.

OUTLINE OF TOPICS COVERED

- An introduction to EMS auditing
- ISO 14001 background
- ISO 14001:2015 requirements section by section from an auditor's perspective (including changes from the 2004 edition)
- Roles and responsibilities during an audit
- Audit Planning
- Preparation and use of Checklists
- Opening Meeting
- Communications
- Executing the Audit (Case Studies)
- Recording Nonconformances
- Corrective Action
- Closing Meeting
- The Audit Repvort
- Follow-up

BENEFITS OF ATTENDING

- Test the effectiveness of a EMS
- Ensure conformance to ISO 14001 requirements
- Determine readiness for registration
- Identify areas to improve

WHO SHOULD ATTEND?

- Individuals with knowledge of the ISO 14001 Standard; EMS Managers and those professionals or employees who will be managing, conducting or participating in internal EMS audits.
- Those individuals responsible for supplier performance who may have occasion to audit supplier quality systems or review audit results for supplier EMS.

PREREQUISITES

ISO 14001 Introduction is recommended

QUALITY & PRODUCTIVITY IMPROVEMENT TRAINING

ADVANCED PRODUCT QUALITY PLANNING (APQP)

CERTIFICATE: All attendees receive an official certificate upon successful completion of the course.

INDUSTRY: Automotive DURATION: 2 Days

The course will familiarize the participant with the normally occurring activities within the APQP process. The APQP process includes activities in the early planning/concept stage, design phase, process analysis, production launch and continuous improvement. Through hands on workshops, participants will experience how the APQP process impacts product realization. Participants will learn the correct method of completing control plans in order to meet customer and QMS standard requirements.

OUTLINE OF TOPICS COVERED

- Introduction to APQP
- Purpose of APQP
- Identify the APQP phases, processes and corresponding milestones
- Defining the Program
- Product and Process Design Development
- Product and Process Validation
- Review, Assessment and Corrective Action
- Identify the appropriate activities for each phase
- Examine the relationship among the APQP deliverables and ISO/TS 16949
- Examine the linkage between process flow charts, FMEAs, control plans and PPAP
- Control plan methodology
- Workshop exercises/application

BENEFITS OF ATTENDING

- Save time (organized program development)
- Promote effective communication between departments (avoid misunderstandings)
- Provide a framework for continuous improvement through feedback assessment and corrective action (save money and time)
- Avoid Customer complaints and disruptions and costly containment activities

WHO SHOULD ATTEND?

APQP Cross-Functional team members (anyone in an IATF 16949 environment) should attend. Each department must have an individual capable of participating in the process. Beginner and intermediate level students are most suitable (experts will already be familiar with the course content, and the linkages and benefits of APQP).

PREREQUISITES

An understanding of ISO/TS 16949 is beneficial, but not required.

FAILURE MODE & EFFECTS ANALYSIS (FMEA)

CERTIFICATE: All attendees receive an official certificate upon successful completion of the course.

INDUSTRY: General DURATION: 1 Day

The Failure Mode and Effects Analysis (FMEA) workshop is an important design and manufacturing tool intended to help prevent failures and defects from occurring and reaching the customer. The workshop will include working with team members to learn how to methodically study the cause and effect of failures before they occur. The FMEA workshop will focus on potential product and process failures. Each participant will examine and identify potential failures. An analysis is made of its effect on the total system, the causes and current design/process controls. A risk analysis is derived through evaluating the severity, frequency of occurrence, and likelihood of detection/prevention of each failure mode. Once completed, participants will analyze the resulting data and develop a plan to address potential high-risk issues.

OUTLINE OF TOPICS COVERED

- Introduction
- Team Requirements
- Key Elements of a FMEA (Design/Process)
- FMEA Worksheet Completion
- Application

BENEFITS OF ATTENDING

- Save time (organized systematic approach to completing FMEAs)
- Save money (prevent failures in upfront planning, incorporate prevention and detection methods into the manufacturing process and design)
- Promote effective communication between departments (avoid misunderstandings, establish a common language of terms)
- Provide a framework for continuous improvement through feedback assessment and corrective action (save money and time)

WHO SHOULD ATTEND?

- APQP cross-functional team members. Each department must have an individual capable of participating in the process.
- Program managers, engineers (design, product, manufacturing), manufacturing team leaders and supervisors, quality and materials personnel.
- Beginner and Intermediate level course (Experts will already be familiar with the course content).

PREREQUISITES

APQP Overview would be a benefit but not a prerequisite (depends on the position of the person taking the course).

PRODUCTION PART APPROVAL PROCESS (PPAP)

CERTIFICATE: All attendees receive an official certificate upon successful completion of the course.

INDUSTRY: Automotive DURATION: 1 Day

This course will familiarize the participant with the generic requirements for production part approval for all production and service commodities. The procedures, reporting requirements and activities for Ford, General Motors and Chrysler are discussed. Through activities, participants will learn how to assemble and critique the PPAP package for submission to a potential customer. PPAP is one of the requirements by automotive companies to comply with the Advanced Product Quality Planning (APQP) requirements of ISO/TS 16949:2009 and the Design and Development section of ISO/TS 16949:2009.

OUTLINE OF TOPICS COVERED

- Introduction to PPAP
- Scope, definition and purpose
- When submission is required
- Submission levels and requirements
- Process requirement
- Customer specific requirements (Ford, Chrysler, General Motors)
- Workshop exercises/application

BENEFITS OF ATTENDING

- Efficiently and effectively develop and submit packages
- Ensure compliance to ISO/TS 16949
- Provides feedback for future related projects
- Reduce waste and improve the quality of products
- Clearly communicate changes in product/process characteristics

WHO SHOULD ATTEND?

- Internal auditors; anyone involved in the development and submission of PPAP packages; anyone involved in the implementation of ISO/TS 16949.
- APQP cross-functional team members (anyone in an ISO/TS 16949 environment). Each department must have an individual capable of participating in the process.
- Project Managers, Engineers and Quality Department Personnel.
- Beginner and Intermediate level students (experts will already be familiar with the course content).

PREREQUISITES

- APQP Overview would be a benefit.
- An understanding of ISO/TS 16949 is beneficial but not required.
- Failure Mode and Effects Analysis (FMEA)

MEASUREMENT SYSTEM ANALYSIS

CERTIFICATE: All attendees receive an official certificate upon successful completion of the course.

INDUSTRY: Automotive DURATION: 2 Days

This course will enhance the knowledge of participants in the application of the Measurement System Analysis (MSA) methodology. MSA examines the repeatability and reproducibility of measurement equipment (variable and attribute gauges).

OUTLINE OF TOPICS COVERED

- Workshop objectives and exercises
- What is MSA?
- Why is it important?
- The revisions to MSA 4th Edition
- Define MSA Purpose and Terminology Measurement System Process
- Measurement Strategy and Planning
- Gauge Repeatability and Reproducibility (R&R) Analysis
- Attribute Gauge Study
- Problem Solving of MSA Issues

BENEFITS OF ATTENDING

- Learn how to effectively implement Measurement System Analysis per the AIAG 4th edition requirements.
- Improve measurement systems to reduced defects, scrap, rework, spills and associated losses due to measuring errors.
- Supports the PPAP process and APQP.
- Measurement System Analysis is an integral part an effective gauge control program.

WHO SHOULD ATTEND?

Personnel involved in the measurement process including study operators, quality engineering, quality managers, quality technicians, PPAP Coordinators, APQP project managers, and quality system management representatives.

PREREQUISITES

None

STATISTICAL PROCESS CONTROL (SPC)

CERTIFICATE: All attendees receive an official certificate upon successful completion of the course.

INDUSTRY: General DURATION: 3 Days

This workshop will focus on the application of Statistical Process Control in a manufacturing environment. It will cover the identification, control and reduction of process variation.

OUTLINE OF TOPICS COVERED

- Introduction
  - General
  - Concept Overview
  - Need for Commitment
  - Program Objectives
- How Quality is Changing
  - Inspection
  - Limitations of Go/No Inspection
  - Illustration of Defect Prevention
  - Quality Cost Concept
  - What are the Quality Costs
- Where to Begin
  - The Need to Select a Starting Point
  - Pareto Analysis Techniques
  - Cause & Effect ("Fishbone")
  - Process Flow Chart
- Histograms
  - The Concept of Frequency Distribution
  - How to Construct a Histogram
  - Histogram: Short Cut Method
  - Variability
  - Shape of a Distribution
  - Pattern Analysis
- Statistical Measures of Process Variation
  - Statistical Measures
  - Measures of Center and Spread
  - Prediction Using the Normal Curve
  - The Normal Distribution and Capability Concepts
  - Tables for the Normal Curve and case study
  - Measures of Capability
    - The Capability Index System
    - Capability Ratio (CR) and Percent Capable (PC)
    - Short-Run Versus Long-Run Capability
    - Sample Size Requirements
- Variable Control Charts
  - Introduction
  - Common Cause Versus Special Cause Variation
  - Control Chart Concept
  - Constructing the X Bar and R Chart
  - The Use of A2, in Calculation Limits
  - Using the Averages and Ranges Chart
  - Initial Study to Establish Control Limits
  - Individuals and Moving Range Chart (X and MR)
- Control Charts for Attributes
  - Introduction
  - Limitations of Control Charts for Attributes
  - Application of Attribute Charts
  - Steps to Construct the p-Chart
  - Using the p-Chart
  - np Control Chart
  - Steps to Construct the np Chart
  - C and u Charts
  - The u Chart
- Control Chart Interpretation
  - Introduction
  - Points Beyond Control Limits: Range Chart
  - Points Beyond Control Limits: Averages Chart
  - Unnatural or non-Random Patterns: X Bar and R
  - Run of Seven Intervals Up or Down
  - Points Hugging Centerline or Control Limits
  - Warning Limits
  - Never "Double Check" Out of Control Points
  - Interpreting the p-Chart
  - Unnatural or Non-Random Patterns: p-Chart
  - Run of Seven Pints on One Side of Centerline
  - Run of Seven Intervals Up or Down

STATISTICAL PROCESS CONTROL (SPC) - CONTINUED

- Measurements Systems Analysis
  - Introduction
  - The Measurement System
  - Sources of Error

BENEFITS OF ATTENDING

- Select beneficial applications for SPC
- Construct and analyze histograms
- Determine statistical properties of process variation
- Calculate capability indices
- Construct variable and attribute control charts
- Analyze control charts for abnormal patterns
- Verify the acceptability of measurement systems

WHO SHOULD ATTEND?

Individuals from manufacturing, engineering and quality assurance who are involved in the identification, development and application of statistical techniques.

PREREQUISITES

None

ADVANCED QUALITY PLANNING (AQP)

CERTIFICATE: All attendees receive an official certificate upon successful completion of the course.

INDUSTRY: General DURATION: 3 Days

Advanced Quality Planning (AQP) is a process that can determine how successful an organization will be in satisfying their customer's requirements when bringing a new product to market. Most serious quality issues can be traced back to flaws occurring during this critical activity. This workshop will show participants the proper methodology to use when preparing for product launch. Advanced Quality Planning, Failure Mode & Effects Analysis and the Product/Process Validation will be covered in detail. Participants will apply the concepts learned during the workshop on their own processes and products. The output will be a more effective method for ensuring newly designed products and processes meet customer expectations. This course is designed to be delivered onsite at your location in order to incorporate your designs and manufacturing processes into the workshops. Participants will require access to drawings, specifications, test methods and the shop floor.

OUTLINE OF TOPICS COVERED

- Introduction to AQP
- Identify the AQP phases, processes and corresponding milestones
- Defining the Program
- Product Design and Development
- Design FMEA
- Process Design and Development
- Process Flow Diagrams
- Process FMEA
- Production Control Plans
- Product and Process Validation
- MSA overview
- SPC overview
- PPAP
- Feedback, Assessment and Corrective Action

BENEFITS OF ATTENDING

- Save time (organized program development)
- Promote effective communication between departments (avoid misunderstandings)
- Provide a framework for continuous improvement through feedback assessment and corrective action (save money and time)
- Avoid Customer complaints, disruptions and costly containment activities

WHO SHOULD ATTEND?

- AQP cross-functional team members (anyone in an ISO 9001 or AS9100D environment). Each department must have an individual capable of participating in the process.
- This process can apply to any product in any industry.
- Those working in Engineering (Design/Process/Quality), Manufacturing, Quality, Facilities, Purchasing, Field Service, and Supplier Quality

PREREQUISITES

None

EFFECTIVE PRODUCT LAUNCH (EPL)

CERTIFICATE: All attendees receive an official certificate upon successful completion of the course.

INDUSTRY: General DURATION: 3 Days

Product Launch is a process that can determine how successful an organization will be in satisfying their customer's requirements for the duration of the contract. Most serious quality issues can be traced back to flaws occurring during this critical activity. This workshop will show participants the proper methodology to use when preparing for product launch. Advanced Quality Planning, Failure Mode & Effects Analysis and the Production Part Approval Process will be covered in detail. Participants will apply the concepts learned during the workshop on their own processes and products. The output will be a more effective method for ensuring newly designed products and processes meet customer expectations. This course is designed to be delivered onsite at your location in order to incorporate your designs and manufacturing processes into the workshops. Participants will require access to drawings, specifications, test methods and the shopfloor.

OUTLINE OF TOPICS COVERED

- Introduction to APQP
- Identify the APQP phases, processes and corresponding milestones
- Defining the Program
- Product Design and Development
- Design FMEA
- Process Design and Development
- Process Flow Diagrams
- Process FMEA
- Production Control Plans
- Product and Process Validation
- MSA overview
- SPC overview
- PPAP
- Feedback, Assessment and Corrective Action

BENEFITS OF ATTENDING

- Save time (organized program development)
- Promote effective communication between departments (avoid misunderstandings)
- Provide a framework for continuous improvement through feedback assessment and corrective action (save money and time)
- Avoid Customer complaints and disruptions and costly containment activities

WHO SHOULD ATTEND?

- APQP cross-functional team members (anyone in an IATF 16949 environment) should attend. Each department must have an individual capable of participating in the process.
- Those working in Engineering (Design/Process/Quality), Manufacturing, Quality, Facilities, and Supplier Quality.

PREREQUISITES

None

APQP IN AEROSPACE SECTOR (BASED ON SCMH:2017)

CERTIFICATE: All attendees receive an official certificate upon successful completion of the course.

INDUSTRY: Aerospace DURATION: 3 Days

The APQP course provides the necessary knowledge to establish an action plan in order to implement APQP into your company's processes and its supplier chain, and to understand the challenges of the APQP/PPAP handbook, available in SCMH.

OUTLINE OF TOPICS COVERED

- Benefits of a controlled project management
- Project breakdown: APQP stages and milestones, elements and deliverables
- Element sheets
- Management's involvement and actions according to the risk level of a project
- 5 APQP stages
- Product status at the end of each stage and project risk analysis
- Composition of teams (core team), Visible Planning and hard point management
- Measuring the progress of a stage (checklist) and «gate review» content
- Deployment of APQP in the suppliers' companies
- Definition of project indicators: link with IAQG strategy
- Change management during a project: modification-linked risks and challenges
- Presentation of Core Tools: Product FMEA, Process FMEA, MSA, SPC
- Establishment of an action plan
- Examination (MCQ)

BENEFITS OF ATTENDING

- Save time through organized program development.
- Promote effective communication between departments.
- Provide a framework for continuous improvement through feedback, assessment and corrective actions that save time and money.

WHO SHOULD ATTEND?

- Heads of Quality
- Product and Methods Engineers
- Project and Development Teams

PREREQUISITES

None

EFFECTIVE PROBLEM SOLVING USING THE 8D MODEL

CERTIFICATE: All attendees receive an official certificate upon successful completion of the course.

INDUSTRY: General DURATION: 2 Days

Problem Solving is a proven and powerful yet simple step-by-step approach to reducing recurring customer complaints, waste, scrap, rework and the associated costs. This workshop focuses on providing participants with a hands-on and practical application to effectively deal with product and process problems. Teams of participants will learn by applying the 8 Disciplines and related tools and techniques (e.g. 5W2H, process mapping, Pareto, cause & effect diagrams, 5 Whys, etc.) to real problems. The 8-step approach presented here is compatible with other 5-step and 7-step problem solving methodologies used throughout all industries in North America.

OUTLINE OF TOPICS COVERED

- What is Problem Solving?
- When should the 8D approach to problem solving be used and what are the benefits
- Establishing The Team – importance and benefits of including the right people in a cross functional team
- Define the Problem – how to describe issues in clear and measurable terms
- Implement and Verify Interim (containment) Actions – how to effectively protect the customer by containing defects
- Define/Verify Root Causes – define potential root causes and verify their effect on the problem to select key root causes
- Choose and Verify Corrective Actions – selecting the best corrective actions and verifying their effectiveness
- Implement Permanent Corrective Actions – effectively implement corrective actions
- Prevent Recurrence – select and implement the best preventive actions
- Congratulate the Team – positively reinforce effective team problem solving

BENEFITS OF ATTENDING

- Reduction and elimination of significant recurring problems
- Improved operational and financial performance
- A repeatable approach to resolving problems that can be applied by all organizational personnel

WHO SHOULD ATTEND?

- Personnel at all levels who are directly involved with significant recurring problems, including: production, maintenance, quality, materials management engineering and design.
- Experienced personnel who are already participating on problem solving teams, but are not convinced of the current effectiveness of the process for achieving permanent problem resolution and/or achieving cost saving opportunities.

PREREQUISITES

None

QRQC AWARENESS

CERTIFICATE: All attendees receive an official certificate upon successful completion of the course.

INDUSTRY: General DURATION: 1 Day

This course covers all aspects to successfully implement this efficient problem solving approach, involve production departments and guarantee a progressive scaling in the involvement of managers, while understanding the 6 key success factors, in particular, the onsite problem management.

OUTLINE OF TOPICS COVERED

- Feedback of your problem-solving practices
- QRQC approach in details:
  - Approach origins
  - Success key factors
  - The 3 implementation levels
  - Problem selection and prioritization
  - Stages and key roles
- Duration and frequency of reviews
- Benefits of this approach in your own context
- Establishment of your own layout plan for this approach
- Main pitfalls to avoid
- Questions to consider for the monitoring of approach effectiveness

BENEFITS OF ATTENDING

Solve problems quickly and effectively to prevent occurrence. Develop in your team an attitude of reality-based management and problem solving. Use lessons learned for future projects to improve product and process quality.

WHO SHOULD ATTEND?

- Site Manager
- Production Manager
- Quality Manager
- Quality Coordinators
- Customer Contacts

PREREQUISITES

None

REVERSE PROCESS FMEA

CERTIFICATE: All attendees receive an official certificate upon successful completion of the course.

INDUSTRY: Automotive DURATION: 1 Day

Used as a top-down analysis, the traditional FMEA approach has well-established limitations. For example, results may not be comprehensive as it only identifies major failure modes, or resources may be drained in a never-ending "what if" analysis. Taken from the bottom-up, however, Reverse FMEA can shed light on significant improvements with measurable bottom line impact. This course features a significant hands-on approach. Using information and actual operational data combined with working sessions and plant observations, participants will develop actionable plans while maturing their FMEA implementation skills.

OUTLINE OF TOPICS COVERED

- Limitations of the traditional PFMEA approach
- The Reverse PFMEA approach
- How to Implement a Reverse PFMEA
- Application Examples
- Benefits of the Reverse PFMEA
- Hands on PFMEA Development
- Go-Forward Action Plan

BENEFITS OF ATTENDING

This course features a significant hands-on approach. Using information and actual operational data combined with working sessions and plant observations, participants will develop actionable plans while maturing their FMEA implementation skills.

WHO SHOULD ATTEND?

Anyone involved in PFMEA implementation: Manufacturing, Process, or Quality Engineers, Program Managers, Supervisors, Manufacturing Managers, Quality Managers, etc.

PREREQUISITES

Process Failure Mode & Effects Analysis Training combined with hands on experience is an asset.

AIAG & VDA FAILURE MODE & EFFECTS ANALYSIS TRANSITION

CERTIFICATE: All attendees receive an official certificate upon successful completion of the course.

INDUSTRY: Automotive DURATION: 1 Day

We now have a common foundation for FMEA across sectors of the automotive industry which are represented by the Automotive Industry Action Group and the Verband der Automobilindustrie. As stated in the Handbook itself, "the industry is challenged by increasing quality demands of the customer, the necessary cost optimization of the products and processes, and the higher complexity, as well as the product liability of the designer and manufacturer by legislation". That is why this manual focuses on the technical aspects of risk.

OUTLINE OF TOPICS COVERED

- Introduction
  - Principle changes
    - 7 – Step Approach
    - 5T's Process
    - New rating charts
    - Action priority
    - Recommended Action split into Prevention/Detection
    - FMEA Report
  - Changes you do not need to make
  - Transition Strategy
- Design FMEA
  - System, Element and Component
  - Next Higher Level, Focus Element and Next Lower Level
  - Emphasis on Prevention Controls
  - Detection ratings expanded
- Process FMEA
  - Process Item System, Subsystem, Part Element or Name of Process
  - Process Work Element 4M Type
  - Options for documenting Function and Requirement/ Product

BENEFITS OF ATTENDING

Participants will learn how to use the new format along with the theory behind the changes. The course clearly shows the relationships between structure analysis, function analysis, failure analysis and risk analysis. The concept of Action Priority versus Risk Priority Number is fully explained.

WHO SHOULD ATTEND?

Technical personnel already training in the use of FMEAs.

RELATED INFORMATION

All participants will receive a copy of the AIAG/VDA FMEA Handbook.

PREREQUISITES

None

AIAG & VDA FAILURE MODE & EFFECTS ANALYSIS IMPLEMENTATION

CERTIFICATE: All attendees receive an official certificate upon successful completion of the course.

INDUSTRY: Automotive DURATION: 1 Day

We now have a common foundation for FMEA across sectors of the automotive industry which are represented by the Automotive Industry Action Group and the Verband der Automobilindustrie. As stated in the Handbook itself, “the industry is challenged by increasing quality demands of the customer, the necessary cost optimization of the products and processes, and the higher complexity, as well as the product liability of the designer and manufacturer by legislation”. That is why this manual focuses on the technical aspects of risk. Additional days available for onsite live application workshops.

OUTLINE OF TOPICS COVERED

- Introduction
- 7 – Step Approach
- 5T’s Process
- The 5 Phase Method
- Design FMEA
- Process FMEA
- Rating charts
- Action priority
- Recommended Actions
- FMEA Report

BENEFITS OF ATTENDING

Participants will learn how to use the new format along with the theory behind the changes. The course clearly shows the relationships between structure analysis, function analysis, failure analysis and risk analysis. The concept of Action Priority versus Risk Priority Number is fully explained.

WHO SHOULD ATTEND?

All personnel planning to participate in FMEA teams.

RELATED INFORMATION

All participants will receive a copy of the AIAG/VDA FMEA Handbook.

PREREQUISITES

None

LAYERED PROCESS AUDITS

CERTIFICATE: All attendees receive an official certificate upon successful completion of the course.

INDUSTRY: Automotive DURATION: 1 or 2 Days

Management presence on the shop floor sends the message that Leadership is committed and involved in the Quality Management System. Whether you are registered to ISO 9001, ISO/TS 16949, ISO 14001, AS9100 or ISO 13485, you will benefit from implementing layered process audits, while enhancing your management responsibility process.

Layered Process Audits are a customer requirement for many suppliers to the automotive and aerospace industries. This course will take a team through the basic concepts underlying Layered Process Audits. Included as part of the training, are workshop developed recommendations outlining a comprehensive implementation plan. The second day is optional, where the consultant will accompany auditors performing actual audits, as well as facilitate team review and revision of checklists and reaction plans.

OUTLINE OF TOPICS COVERED

DAY 1

- Introduction to layered process audits
  - Why you need to do them
  - The purpose for doing LPA's
  - The benefits
  - How a Layered Process Audit System works
- Developing an LPA system
  - Forming a team
  - Elements of an audit
  - Training
  - Checklist development
  - Reaction Plans & Countermeasures
- Planning and scheduling the various layers of management that will conduct the audits
  - Determine the Plan
  - Establish audit frequencies
  - Error-Proofing verification audits, criteria and guidelines
- Implementation
  - Audit elements
  - Checklists
  - Reaction plans
  - Forms
  - Auditor training
- Workshop Team Breakout
  - Workshop Agenda
  - Workshop Deliverables
  - Analyze and report status to senior leadership

Day 2 (OPTIONAL)

On-site audits and recommendations including:

- Specific auditor coaching during audits
- Recommendations for OEM compliance
- Checklist verification/validation
- Auditor mentoring
- Reaction plan critique
- Review facilitation

BENEFITS OF ATTENDING

The reduction of variation and prevention of mistakes, reduction in manufacturing wastes such as: scrap and rework, instilling discipline and standardization into your business systems and last but not least, improved communication through organizational levels.

WHO SHOULD ATTEND?

All members in your organization including: operators, lead-hands, supervisors, managers, and operating committee members.

PREREQUISITES

None

GROUP PSA QIP (NSA/PCPA/QSB+) STANDARD

CERTIFICATE: All attendees receive an official certificate upon successful completion of the course.

INDUSTRY: Automotive DURATION: 3 Days

In 2015, the French car manufacturer Group PSA has performed the evolution of its system for evaluating the industrial performance of its suppliers through the QIP standard. This system includes 3 audits questionnaire, audits which will be carried out during the various phases of collaboration with PSA.

OUTLINE OF TOPICS COVERED

- The QIP V3 framework and the PSA expectations
- The 3 phases of QIPV3
- The QSB+ format and scoring rules
- Audit schedule.
- Review of QSB+ requirements chapter per chapter
- Risk analysis and the situation of the company relative to the chapters reviewed during the day (simulation of the quotation)
- Analysis of the self-assessment
- Control of knowledge

BENEFITS OF ATTENDING

- Know the content of the QIP process (phases and milestones)
- Understand the different phases of evaluation by audit (NSA, PCPA, QSB+)
- Understand the requirements of the QIP reference
- Know how to identify deviations from requirements

WHO SHOULD ATTEND?

This training is intended at least for the functions of Quality Manager, Production Manager, Logistics Manager, Maintenance Manager, Development Quality Manager and Industrialization Manager.

PREREQUISITES

- This training is accessible to people who have a good knowledge of the requirements of the ISO TS 16949/ IATF or the requirements of the automotive standards.

LEAN SIX SIGMA YELLOW BELT

CERTIFICATE: All attendees receive an official certificate upon successful completion of the Lean Six Sigma Yellow Belt course provided by TRIGO Company.

INDUSTRY: General DURATION: 3 Days

Yellow Belts participate in process management activities. They fully understand the principles of Six Sigma and are capable of characterizing processes, solving problems associated with their work responsibilities and implementing and maintaining the gains from improvements.

OUTLINE OF TOPICS COVERED

- Define Phase
  - The Basics of Six Sigma
  - The Fundamentals of Six Sigma
  - Selecting Lean Six Sigma Projects
  - The Lean Enterprise
- Measure Phase
  - Process Definition
  - Six Sigma Statistics
  - Measurement System Analysis
  - Process Capability
- Control Phase
  - Lean Controls
  - Statistical Process Control (SPC)
  - Six Sigma Control Plans

BENEFITS OF ATTENDING

Identify improvement opportunities, determine what's important to the customer, determine what to measure (Y), quantify current performance and set improvement target. Identify the Xs, causes of variation, to quantify their impact and to put controls in place to maintain the improved performance level over time.

WHO SHOULD ATTEND?

- General Managers, Operational Managers
- Engineers (Quality, Production, Engineering)
- Team leaders (Quality, Production, Engineering)

PREREQUISITES

None

LEAN SIX SIGMA GREEN BELT

CERTIFICATE: All attendees receive an official certificate upon successful completion of the Lean Six Sigma Green Belt course provided by TRIGO Company.

INDUSTRY: General DURATION: 5 Days

Green Belts are practitioners of Six Sigma Methodology and typically work within their functional areas or support larger Black Belt projects. They are capable of solving problems within their local span of control, remain in their current positions, but apply the concepts and principles of Six Sigma to their Job environment.

OUTLINE OF TOPICS COVERED

- Define Phase
  - The Basics of Six Sigma
  - The Fundamentals of Six Sigma
  - Selecting Lean Six Sigma Projects
  - The Lean Enterprise
- Measure Phase
  - Process Definition
  - Six Sigma Statistics
  - Measurement System Analysis
  - Process Capability
- Analyze Phase
  - Patterns of Variation
  - Inferential Statistics
  - Hypothesis Testing
- Improve Phase
  - Simple Linear Regression
  - Multiple Regression Analysis
- Control Phase
  - Lean Controls
  - Statistical Process Control (SPC)
  - Six Sigma Control Plans

BENEFITS OF ATTENDING

- Identify improvement opportunities
- Determine what's important to the customer
- Determine what to measure (Y)
- Quantify current performance and set improvement target
- Increase efficiency in identifying the Xs, causes of variation and in quantifying their impact
- Increase efficiency of the problem-solving activities and the control of the improved performance level

WHO SHOULD ATTEND?

- Engineers (Quality, Production, Engineering)
- Those responsible for continuous improvement
- Team leaders (Quality, Production, Engineering)

PREREQUISITES

None

PROJECT MANAGEMENT ESSENTIALS

CERTIFICATE: All attendees receive an official certificate upon successful completion of the course.

INDUSTRY: General DURATION: 1 Day

This course provides a high-level overview of the most commonly used tools and procedures for Project Management as outlined in the Project Management Book of Knowledge (PMBOK). Participants will become familiar with these tools and how they integrate with each other, as well as when and how they may be useful for their own projects.

OUTLINE OF TOPICS COVERED

- Foundation Concepts
  - Project, Program, Portfolio Relationship
  - The Role of the Project Manager
- Initiating the Project
  - Project Launch Documentation
  - Scoping the Project
  - Business Requirements and Solution Design
  - Vertical and Lateral Visibility and Traceability
  - Managing Requirements Change and Scope Creep
  - Project Constraints and Assumptions
  - Reverse Engineering from Deliverables
- Planning the Project
  - Communication Plans
  - Delegation and its Imposters
  - Stakeholder Analysis
  - When to use the new Agile
- Executing, Monitoring and Controlling the Project
  - Working as a Team
  - Work Breakdown Analysis
  - Estimates and Risk Planning
  - Scheduling
  - Tracking Progress
  - Quality Assurance
- Closing the Project
  - Managing the Solution Acceptance Process
  - Last minute Changes

BENEFITS OF ATTENDING

Participants will learn about the importance of planning in the execution of major projects including the roles of the Project Manager and Principal Project Groups. The foundational concepts of project, program, and portfolio management are explained in detail.

WHO SHOULD ATTEND?

New Project/Program Managers, those intending to pursue PMP certification and looking for a high-level overview to kick off their studies, or Managers and teams seeking to improve Program Management capabilities within the organization. Applicable for all industries.

PREREQUISITES

None

IMPLEMENTING APQP & PPAP WITHIN PSA - AQF

CERTIFICATE: All attendees receive an official certificate upon successful completion of the course.

INDUSTRY: Automotive DURATION: 2 Days

Gradually since 2015, the French manufacturer PSA changes its Supplier Quality Assurance standards and adopts for all new vehicle projects or bodies, international standards development steering with suppliers: APQP: Advanced Product Quality Planning and PPAP Production Part Approval Process.

OUTLINE OF TOPICS COVERED

- The Supplier Quality Assurance (AQF)
- Why PSA has adopted APQP & PPAP and the PSA expectations
- The 5 APQP phases of PSA
  - Phase 1: RFQ. Plan and define program
  - Phase 2: Product/Process development
  - Phase 3: Creation of specific tools and production of the first off-tool parts
  - Phase 4: Product / Process Verifications
  - Phase 5: Ramp up
- The APQP grid
- Implement the PCP during APQP & PPAP
- Management rules for APQP
- Training assessment
- Knowledge exam

BENEFITS OF ATTENDING

- Understand the context of changes in the requirements of the PSA manual (SQM).
- Know all requirements and particularities of the APQP & PPAP by PSA.
- Understand the nature of PSA expectations as part of a development project led with APQP & PPAP.
- Know your roles and contributions with the rules of the implementation of the APQP & PPAP.

WHO SHOULD ATTEND?

PSA Tier 1 supplier top and middle management functions: Project Managers, Advance Quality / Quality Planning Engineers, Process / Manufacturing Engineers, Design / Product Engineers, Warranty Specialists, Supplier Quality Engineers, Logistic / Packaging Specialists.

PREREQUISITES

Basic knowledge and experience is necessary from AIAG APQP and PPAP.

eLEARNING

eLEARNING

Is your schedule constantly changing, making it difficult to plan ahead?

You're not alone! Most individuals recognize the need for training, but require a flexible alternative. TRIGO's Online Self-Study Courses, allow students to work at their own pace and schedule. All online self-study material has been taught by certified professionals in the field, providing students with the opportunity to learn from the same material taught in our public seminars.

ADDITIONAL INFO

- $195 US per participant, per course.
- All course materials are delivered electronically.
- Each course is 30 days from start to completion.
- A certificate is delivered on successful completion of a course.

AUTOMOTIVE CORE TOOLS (ACT)

INDUSTRY: Automotive DURATION: 30 Days

This course meets the customer specific requirements of Ford, Chrysler and GM for the qualification of Internal Auditors. Participants in this course will be trained in related core tools (APQP, SPC, MSA, FMEA and PPAP) and the automotive process approach to auditing. As part of the learning process, participants will be responsible for case study audits and/or auditing simulation onsite audits.

OUTLINE OF TOPICS COVERED

- The automotive approach to auditing
- APQP, FMEA, PPAP, MSA, SPC
- Final online exam

FAILURE MODE & EFFECTS ANALYSIS (FMEA)

INDUSTRY: General DURATION: 30 Days

FMEA is an important design and manufacturing tool intended to help prevent failures and defects from occurring and reaching the customer. This course will teach students how to methodically study the cause and effect of failures before they occur, focusing on potential product and process failures.

OUTLINE OF TOPICS COVERED

- Introduction
- Team Requirements
- Key Elements of FMEA (Design/Process)
- FMEA Worksheet Competition
- Application

PRODUCTION PART APPROVAL PROCESS (PPAP)

INDUSTRY: Automotive DURATION: 30 Days

PPAP will familiarize the student with the generic requirements for production part approval for all production and service commodities. The procedures, reporting requirements and activities that most automotive manufacturers are taught. Through activities, students will assemble and critique a PPAP package for submission to a potential customer.

OUTLINE OF TOPICS COVERED

- Introduction to PPAP
- Scope, definition and purpose
- When submission is required
- Submission levels and requirements
- Process requirement
- Customer specific requirements
- Exercises/applications
- Online final exam

SUPPLIER DEVELOPMENT PROGRAM

ARE YOU LOOKING TO:

Improve the quality in your plant?

Improve the quality being shipped in from your suppliers?

Improve areas within your supply chain?

If you answered “YES” then your ultimate goal is to become a world-class manufacturer and TRIGO’s Supplier Development Program is the source you need!

Our Supplier Development program is designed to assist you in improving the performance of your manufacturing plants, as well as those of your suppliers.

Our program is simple - by utilizing our comprehensive metrics based assessment, we are able to link the root cause of any unidentified deficiency and compile recommendations for permanent corrective actions.

This program can be managed by TRIGO or we can develop the program and train your personnel to take ownership for your future manufacturing processes. Whatever your quality concern may be, our qualified team of professionals will work with you and your suppliers to take the necessary steps towards meaningful long-term process improvements.

TRIGO EXPERTS FOR QUALITY

This division offers Quality Expert Consulting, Resident Engineering and Metrology services from experts and consultants who are part of TRIGO's unique global network of quality professionals in Europe, America and Asia, with a dedicated focus on the automotive, aerospace and heavy transportation industries.

The combination of our local expertise and global footprint is unique within many different industries, and provides manufacturers an optimal and cost effective solution that improves their customer and supplier quality performance.

ABOUT TRIGO GROUP

Founded in 1997, TRIGO is a multinational company providing operational quality management solutions for the manufacturing sector, especially in the automotive and aerospace industries. With a team of several thousands of professionals present in 20+ countries across 4 continents, TRIGO offers a comprehensive portfolio of quality assurance services ranging from inspection to expert audit, consulting and training.

www.trigo-group.com

You may find each training description in more detail at **www.trigo-group.com.**

Contact us for more information and let TRIGO assist you with your training needs.

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TRIGO
Global Quality Solutions