



TRAINING SOLUTIONS AND SERVICES

2022 - 2023 COURSE CATALOG



Table of Contents

About Us	3
Training Options	4
ABS Group Certification Programs	5
Process Safety Management Courses	6
C100: Process Safety Management	
C101: Compliance Auditing	
C103: Risk Based Process Safety	
C104: Risk Management Program Compliance	
C105: Resubmitting EPA RMPlans	
C107: Improving PSM Performance	
C108: Risk Management Using Safety Barriers (Bowtie Method)	
C114: Management of Change	
C131: Mechanical Integrity and Understanding RAGAGEPs	
Process Hazard Analysis Courses	16
C110: Advanced Process Hazard Analysis Leader	
C111: Advanced Process Hazard Analyses (PHA) Leader	
C113: Revalidating Process Hazard Analyses	
C200: Layer of Protection Analysis (LOPA)	
C210: Safety Integrity Level	
Root Cause Analysis Courses	22
C120: Root Cause Analysis and Incident Investigation	
C122: Advanced Root Cause Analysis	
C126: Cultural Cause Analysis™	
C140: Human Error Prevention	
Facility Siting Courses	27
C217: APIRP 752, 753 and 756: Facility Siting Regulations and Compliance	
C240: Facility Siting Hazards Analysis Techniques	
ISO Standard Courses	30
C600: Certified ISO 9001 Lead Auditor Training	
C340: Certified ISO 14001 Lead Auditor Training	
C820: Certified ISO 45001 Lead Auditor Training	
Combined Course Options	34

About Us

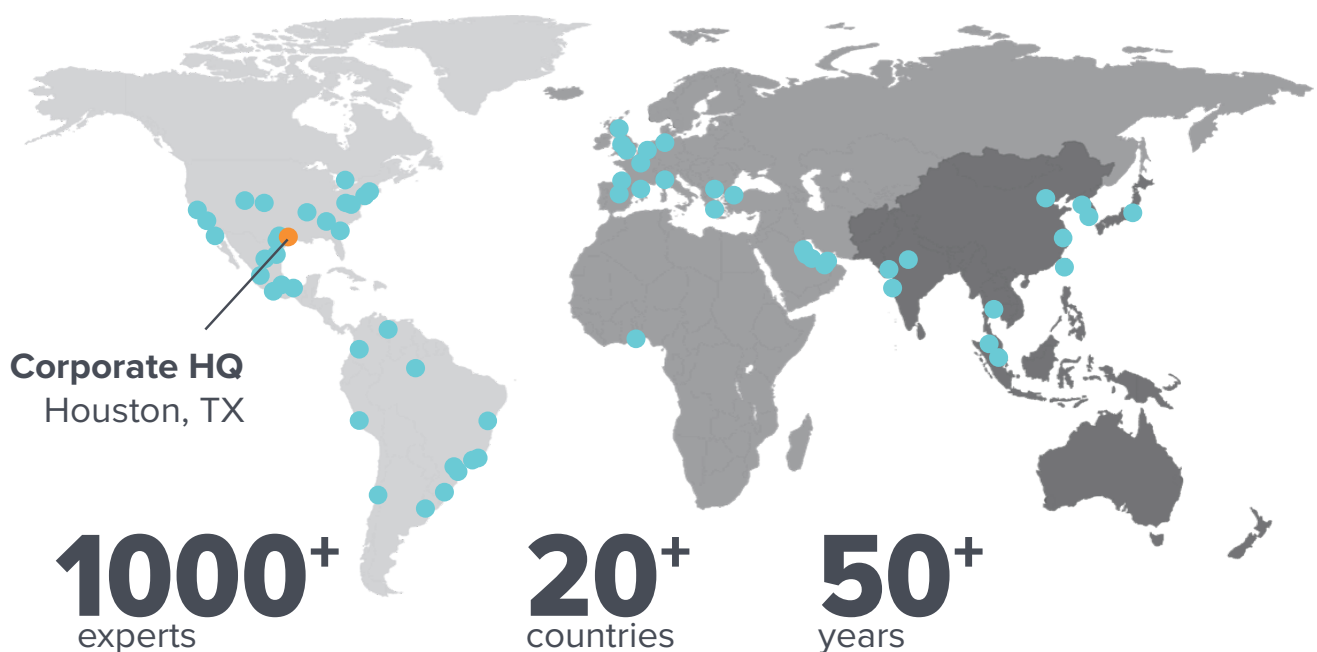
For over five decades, ABS Group has set the standard for risk and reliability management, providing technical expertise to a wide range of diverse industries worldwide.

ABS Group provides data-driven risk and reliability solutions and technical services that help clients confirm the integrity, quality and efficiency of critical assets and operations. Our training experts have delivered customized public and private courses that have helped thousands of professionals globally.

We Wrote the Book

Unlike other providers, our instructors are industry experts and practicing engineers, meaning if you call us for incident investigation support, or process safety management assistance, one of our trainers may very well turn up at your site. This enables us to provide world-class training solutions, with up to date techniques from recent real-world experiences.

We don't simply teach from approved textbooks; our technical experts have written and developed the key industry guidelines and publications used today.





Training Options

At ABS Group we provide our clients with the most cost effective and flexible training options in order to meet the ever-changing needs of an organization. We have three (3) training options available to allow for the greatest flexibility.

- Private on-site instructor led
- Public in-person/virtual instructor led
- eLearning

PRIVATE ON-SITE OR VIRTUAL INSTRUCTOR LED TRAINING

Our private training is our most customizable solution, offering tailored examples and exercises based on the needs of your organization. We partner with our clients to find the best time, date and location for their training.

PUBLIC IN PERSON/VIRTUAL

Our public courses are available to any individual who wishes to attend. The courses may be attended either in person at one of our training locations around the world, or virtually from wherever your employees are based.

eLEARNING

Our eLearning options can be integrated into your in-house learning management system. With a variety of courses available to you, you can make sure your in-house training is of the highest quality with one of our online modules.

ABS Group Certification Programs

Available Certification Programs:

- PHA Leader
- PHA Revalidator
- PSM/RMP Auditor
- Root Cause Analysis/Incident Investigation
- Advanced PHA Leader
- Maritime Root Cause Analysis (RCA) / Incident Investigation

How Much Does a Certification Program Cost?

Certification programs are priced between \$260 to \$300 (USD).

Do I Need Any Prior Qualifications?

Certification Programs typically require attendees to have either a college degree and 2 years experience or a high school diploma and 5 years experience.

Is There a Time Limit for Completing the Certification Program?

Each Certification Program must be completed within 12 months, apart from the PSM/RMP Auditor which must be completed within 18 months.



SCAN ME, CLICK ME

Receive the training you need for a fraction of the regular cost with our pre-enrollment savings plan. View more information about our programs by scanning or clicking on the QR code.



"This has been a fantastic training experience! I had fun working with other attendees who were engaged - very refreshing!" - Client Feedback



Process Safety Management Courses

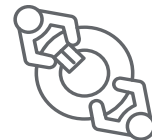
Our Process Safety Management (PSM) Courses are designed to support clients who work alongside the U.S. Occupational Safety and Health Administration (OSHA) PSM regulations.

From compliance auditing to resubmitting Environmental Protection Agency (EPA) Risk Management Plans (RMP), our courses can support you on your journey to a safer facility.

C100: Process Safety Management

ABOUT THIS COURSE

Learn how to interpret the performance-based requirements of the OSHA process safety management (PSM) regulation and the prevention program portion of the EPA risk management program (RMP) rule (the PSM regulations). You will also learn how to develop and implement a cost-effective PSM program for a single facility or an entire corporation.



IN PERSON



See website
for locations



\$1745



3 days

VIRTUAL



Global



\$1745



4 days

PRIVATE



Onsite / Virtual



Request Quote



3 days

WHO SHOULD ATTEND?

- Those needing to implement or maintain an effective PSM program
- Those who will be leading compliance auditing and risk management program compliance efforts
- Everyone who interacts with industry regulators

WHAT WILL I LEARN?

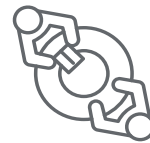
- Learn how to determine whether your facility is covered by OSHA's 29 CFR 1910.119 and EPA's 40 CFR 68
- Develop the understanding necessary to explain the PSM requirements to others in your company who need to understand the issues
- Discover a range of options for compliance that will allow you to develop a PSM program that addresses your specific needs
- Get up-to-the-minute information on OSHA and EPA regulatory enforcement activities and interpretations
- Learn to avoid costly mistakes made by others
- 2.1 Continuing Education Units (CEU)

**COMBINE C100 & C101
TO SAVE 20%**

C101: Compliance Auditing

ABOUT THIS COURSE

In this course, you will learn to perform compliance auditing of process safety management (PSM) and risk management program (RMP) systems in accordance with OSHA and EPA regulations. Attendees will also learn the fundamentals of compliance auditing as well as how to perform compliance auditing of PSM and RMP programs, document the audit results and structure reports for optimal effectiveness.



IN PERSON



See website
for locations



\$1195



2 days

VIRTUAL



Global



\$1195



3 days

PRIVATE



Onsite / Virtual



Request Quote



2 days

WHO SHOULD ATTEND?

- Everyone who needs to develop an auditing program, which is suggested in Appendix C of OSHA's PSM regulation
- Those needing to design or improve an overall auditing program for either a facility or company

WHAT WILL I LEARN?

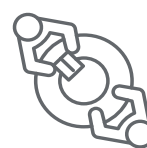
- Learn the fundamentals of auditing to help you structure effective PSM/RMP audits
- Receive auditing tools based on programs that have been successful at companies like yours
- Gain experience in an audit team environment with real-time constraints
- Practice auditing techniques, interviewing personnel and obtaining consensus among team members
- Obtain hands-on experience in reviewing PSM/RMP programs and documentation and in writing specific, concise audits
- 1.4 Continuing Education Units (CEU)

**COMBINE C100 & C101
TO SAVE 20%**

C103: Risk Based Process Safety

ABOUT THIS COURSE

This course teaches you how to use the risk based process safety (RBPS) guidelines to design a new process safety management (PSM) system, correct a deficient PSM system or improve PSM practices. This new framework for process safety builds upon the original ideas published by the Center for Chemical Process Safety (CCPS) in the early 1990s. It integrates industry lessons learned over the intervening years; applies the management system principles of plan, do, check, act; and organizes them in a way that will be useful to all organizations – even those with relatively low-hazard activities – throughout the life cycle of a process or operation.



IN PERSON



See website
for locations



\$1195



2 days

VIRTUAL



Global



\$1195



2.5 days

PRIVATE



Onsite / Virtual



Request Quote



2 days

WHO SHOULD ATTEND?

- Everyone who is unfamiliar with the CCPS framework for the next generation of PSM
- Anyone whose company is challenged by inadequate management system performance, resource pressures or stagnant process safety results

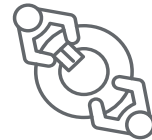
WHAT WILL I LEARN?

- Learn how to apply the next-generation PSM system from the people who wrote the book
- Learn how to improve existing PSM elements or effectively develop new elements
- Learn how to measure the performance of your RBPS elements
- 1.4 Continuing Education Units (CEU)

C104: Risk Management Program Compliance

ABOUT THIS COURSE

Learn about the mandated components of a risk management program (RMP) and how to implement a compliance strategy. Learn the basics of hazard assessments, emergency response programs and risk management plans (RMPlans) as well as the current rulemaking and enforcement initiatives such as EPA audits.



IN PERSON



See website
for locations



\$655



1 day

VIRTUAL



Global



\$655



1.5 days

PRIVATE



Onsite / Virtual



Request Quote



1 day

WHO SHOULD ATTEND?

- Anyone involved in the development and communication of RMPlans as required by EPA's RMP rule 40 CFR 68

WHAT WILL I LEARN?

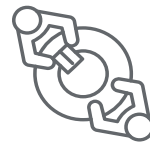
- Learn how to perform and document hazard assessments
- Learn how to upgrade your OSHA process safety management program and emergency response program to meet EPA's requirements
- Use the results of these required programs to help make risk management decisions
- Document the results in a format that the public will understand
- 0.7 Continuing Education Units (CEU)

**COMBINE C104 & C105
TO SAVE 20%**

C105: Resubmitting EPA RMPlans

ABOUT THIS COURSE

Learn how to evaluate and update your existing risk management plan (RMPlan) to comply with the 5-year resubmission requirements of EPA's risk management program (RMP) rule (40 CFR 68). This course provides expert guidance and proven techniques, developed by our engineers during many years of RMP compliance work, for assessing and updating RMPlans in a timely and cost-effective manner.



IN PERSON



See website
for locations



\$655



1 day

VIRTUAL



Global



\$655



1.5 days

PRIVATE



Onsite / Virtual



Request Quote



1 day

WHO SHOULD ATTEND?

- Those who have been given the responsibility of preparing and resubmitting/correcting a RMPlan to meet the requirements of 40 CFR 68 for their facility
- Anyone who needs to confirm that their facility or company has covered all regulatory responsibilities under 40 CFR 68 prior to resubmitting the RMPlan

WHAT WILL I LEARN?

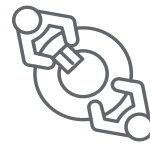
- Learn the pitfalls and mistakes most commonly made when correcting and/or updating RMPlans
- Receive an update on the most recent guidance provided by EPA on RMP rule requirements, interpretations and resubmitting RMPlans
- Receive guidance/tools that will help you efficiently and cost effectively update and submit your revised RMPlan
- Gain experience in assessing/updating example RMPlans in an interactive workshop setting
- Learn ways to maintain your RMPlan to make future resubmittals easier
- 0.7 Continuing Education Units (CEU)

**COMBINE C104 & C105
TO SAVE 20%**

C107: Improving PSM Performance

ABOUT THIS COURSE

Process safety management (PSM) programs have been implemented at many companies for over 20 years, based on meeting regulatory requirements and on the fundamental need to safely manage process hazards at their facilities. Many companies and facilities, though, continue to have PSM performance problems, potentially resulting in catastrophic incidents, serious injuries, lost business and high costs. This course is intended to highlight common performance problems with PSM programs and to introduce proven methods and practical approaches for improving performance.



IN PERSON



See website
for locations



\$2195



4 day

VIRTUAL



Global



\$2195



5 days

PRIVATE



Onsite / Virtual



Request Quote



4 days

WHO SHOULD ATTEND?

- Managers and professionals with responsibility for PSM performance

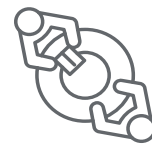
WHAT WILL I LEARN?

- Learn key concepts and practical approaches for improving PSM programs and performance
- Complement compliance-based training to develop and implement more effective PSM programs
- 2.6 Continuing Education Units (CEU)

C108: Bowtie Risk Management

ABOUT THIS COURSE

Effective risk management requires a thorough understanding of the accident pathways linking threats to potentially catastrophic consequences and the measures implemented to prevent this happening. Bowtie diagrams provide a simple visualization of the relationships and the barriers preventing the catastrophic consequences. Bowtie diagrams are easy to interpret unlike the complex and/or numerical results from other risk assessment methods (e.g. PHA, QRA, LOPA) in a way that is easier for non-experts, workforce, engineers and managers to understand.



IN PERSON



See website
for locations



\$1195



2 day

VIRTUAL



Global



\$1195



3 day

PRIVATE



Onsite / Virtual



Request Quote



2 days

WHO SHOULD ATTEND?

- People who would like to understand whether Barrier Diagrams would add value to their organization
- People who have been tasked with creating or using Barrier Diagrams

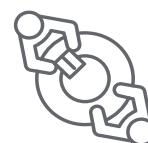
WHAT WILL I LEARN?

- Fundamentals of the Barrier (Bowtie) Methodology
- How to use bowtie diagrams to enhance incident investigations
- How to incorporate Human Factors into bowtie diagrams
- An introduction to Layer of Protection Analysis (LOPA)
- View a free trial of Bowtie Master
- How to correctly apply the methodology to manage risks and maximize benefits
- 1.4 Continuing Education Units (CEU)

C114: Management of Change

ABOUT THIS COURSE

This course emphasizes hazard review techniques commonly used to evaluate changes. It also focuses on improving existing programs for management of change (MOC) and pre-startup safety review (PSSR). You will also learn about other topics such as managing changes during the construction phase of major capital projects, managing personnel changes and using software systems to manage change. Although the techniques covered in this course meet process safety management requirements, the focus is on effectiveness and efficiency, not simply complying with regulations.



IN PERSON



See website
for locations



\$1195



1 day

VIRTUAL



Global



\$1195



1 day

PRIVATE



Onsite / Virtual



Request Quote



1 day

WHO SHOULD ATTEND?

- Those who need to recognize change and common change initiators
- Those who need to make sure that risks are understood
- Those who evaluate controls to manage risk
- Those who follow through to confirm that changes are implemented as intended

WHAT WILL I LEARN?

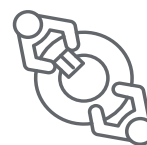
- Learn to manage change effectively both to fulfill requirements and to gain a competitive advantage
- 1.4 Continuing Education Units (CEU)

**COMBINE WITH C111 OR C113
TO SAVE 20%**

C131: Mechanical Integrity and Understanding RAGAGEPs

ABOUT THIS COURSE

This course addresses OSHA process safety management and EPA risk management program mechanical integrity (MI) requirements. Attendees will learn how to develop and implement an efficient MI program. It also includes the inspection, test and preventive maintenance (ITPM) activities for equipment in the petrochemical industry and the recognized and generally accepted good engineering practices (RAGAGEPs) that are the bases for equipment design, fabrication, installation and ITPM plans.



IN PERSON



See website
for locations



\$1645



3 days

VIRTUAL



Global



\$1645



4 days

PRIVATE



Onsite / Virtual



Request Quote



3 days

WHO SHOULD ATTEND?

- Those who need to implement, improve and/or audit mechanical integrity programs
- Those who are responsible for mechanical integrity compliance with OSHA and EPA regulations
- Those who need to know regulations for design, inspection and construction in accordance with RAGAGEPs

WHAT WILL I LEARN?

- This course will cover the pertinent codes and standards and ITPM activities for: Pressure Vessels and Storage Tanks, Piping Systems, Relief and Vent Systems, Rotating Equipment, Instrumentation and Electrical, Fire Protection and Other Mitigation Equipment. Learn strategies for developing inspection, testing, preventive maintenance (ITPM) plans, maintenance procedure lists and maintenance training programs.
- Return to your facility with the means to evaluate current plant practices and immediately begin upgrading the MI program
- Gain knowledge of codes and standards that are the foundation of equipment reliability programs for world-class facilities
- 1.9 Continuing Education Units (CEU)



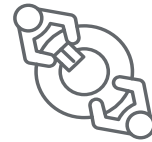
Process Hazard Analysis Courses

Our Process Hazard Analysis (PHA) and Revalidation courses are designed to support individuals to gain the skills necessary to perform PHAs and accompanying studies to comply with OSHA PSM and other regulatory requirements.

C110: Process Hazard Analysis Leader

ABOUT THIS COURSE

Learn practical methods for performing process hazard analysis (PHAs) of systems, procedures and computer software using the hazard and operability (HAZOPs), what if / what-if and checklist analysis techniques that address federal regulatory requirements. Qualify as a “knowledgeable” PHA leader, as required by OSHA and EPA and be eligible for certification as a PHA leader.



IN PERSON



See website
for locations



\$2295



4 days

VIRTUAL



Global



\$2295



5 days

PRIVATE



Onsite / Virtual



Request Quote



4 days

WHO SHOULD ATTEND?

- Anyone who needs to learn how to apply HAZOP, what-if and checklist analyses to any process or system in industries such as chemical, petroleum, pulp and paper, explosives, mining, iron and steel, pharmaceuticals and consumer products

WHAT WILL I LEARN?

- Learn from experts how to perform a PHA, including collecting information, selecting the team, leading a meeting and documenting results
- Focus on human factors issues to analyze procedures in areas such as startup, shutdown and maintenance
- 2.8 Continuing Education Units (CEU)

C110s: Process Hazard Analysis with LEADER Software

Our standard PHA course but following paid registration, we will contact you to complete the software license registration at a discounted rate.

C110st: LEADER Software Workshop

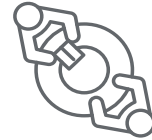
This workshop is for licensed users of the LEADER™ software as part of the annual maintenance program. This workshop follows the Process Hazard Analysis Leader course.

Enquire online for more information.

C111: Advanced PHA Leader

ABOUT THIS COURSE

As a follow on from our Process Hazard Analyses course, learn to use techniques that include the Dow fire and explosion index and the use of EPA-mandated hazard assessments in your PHAs. Previous experience leading HAZOPs, what if (what-if)/checklist analyses and/or failure modes and effects analyses (FMEAs) is required.



IN PERSON



See website
for locations



\$655



1 day

VIRTUAL



Global



\$655



1 day

PRIVATE



Onsite / Virtual



Request Quote



1 day

WHO SHOULD ATTEND?

- Anyone needing to expand PHA skills
- Anyone who wants to improve strategy for defining nodes, elevate the thoroughness of PHAs and learn how to expedite the resolution of action items in meetings

WHAT WILL I LEARN?

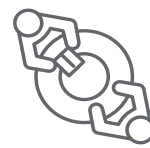
- Learn new techniques to improve your PHAs
- Reduce the resources and time required for completing a high-quality PHA
- Improve in PHA quality and be eligible for Process Safety Institute certification as an Advanced PHA Leader
- Learn when and how to use a variety of techniques for identifying process hazards
- 0.7 Continuing Education Units (CEU)

**COMBINE C110 & C111
TO SAVE 20%**

C113: Revalidating Process Hazard Analyses

ABOUT THIS COURSE

In this course attendees learn how to efficiently revalidate process hazard analyses (PHAs). By learning how to use a revalidation decision tree, attendees gain a productive revalidation tool that accounts for management goals, previous documentation, PHA quality and operating history. Whether or not you are subject to the U.S. OSHA process safety management (PSM) regulation (29 CFR 1910.119), it is considered a recognized and generally accepted industry practice to update or revalidate PHAs or other types of risk analyses every 5 years to confirm that the “risk picture” of the process or facility has not changed.



IN PERSON



See website
for locations



\$1195



2 days

VIRTUAL



Global



\$1195



3 days

PRIVATE



Onsite / Virtual



Request Quote



2 days

WHO SHOULD ATTEND?

- Anyone who needs to determine an appropriate approach for revalidation
- Anyone who needs to effectively address previous PHA deficiencies
- Anyone who needs to prepare for and document a PHA revalidation
- Those who want to expand their basic PHA leadership skills may want to consider taking the Advanced PHA Leader course or the Layer of Protection Analysis course

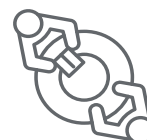
WHAT WILL I LEARN?

- Discover how to identify a revalidation approach that will work for your PHAs
- Learn ways to lead a team through a revalidation analysis that satisfies OSHA and EPA requirements
- Gain a thorough understanding of your options for addressing PHA revalidation requirements
- Learn what resources may be required to perform a revalidation and how to use them more efficiently
- Learn how to prepare for, perform and document a revalidation analysis to make future analyses easier and to produce a report useful to other end users in your company
- 1.4 Continuing Education Units (CEU)

C200: Layer of Protection Analysis Training LOPA

ABOUT THIS COURSE

Layer of Protection Analysis (LOPA) is the newest methodology for hazard evaluation and risk assessment. LOPA is a hybrid of qualitative and quantitative analysis and helps the analyst to make consistent decisions on the adequacy of existing or proposed layers of protection against an accident or scenario. The technique is ideally suited for companies striving to meet specific risk targets or to lower risk as low as reasonably practicable (ALARP).



IN PERSON



See website
for locations



\$1195



2 days

VIRTUAL



Global



\$1195



2.5 days

PRIVATE



Onsite / Virtual



Request Quote



2 days

WHO SHOULD ATTEND?

- Executives who want to expand their risk management strategies by adding LOPA
- Safety specialists who are familiar with existing methods and want to add LOPA to their skill set
- Risk analysts who have used qualitative hazard technologies and need to perform LOPA
- Process engineers, chemists, operations and maintenance personnel and others who may be affected by LOPA recommendations

WHAT WILL I LEARN?

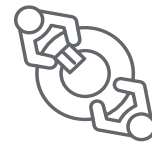
- Learn rules for how and when companies can use LOPA to determine which scenarios pose the greatest risk and which scenarios have residual risk that is too high
- Learn how to:
 - Estimate the frequency category for the initiating event of a scenario
 - Develop scenarios for either a new process or changes to a process
 - Develop scenarios starting from a qualitative hazard evaluation (e. g. HAZOP analysis)
 - Calculate the scenario risk and determine the consequence category for the unmitigated scenario
 - Determine which protection layers meet the criteria for independence and uniqueness
- Receive a student text book, a CCPS book on LOPA and risk acceptance and judgment protocols
- 1.4 Continuing Education Units (CEU)

**COMBINE C200 & C210
TO SAVE 20%**

C210: Safety Integrity Level

ABOUT THIS COURSE

This course focuses on the principles involved in the design of safety instrumented systems (SIS) that conform to the requirements of ANSI/ISA-61511-2018. (IEC 61511 Mod). In this intensive course, we will teach you how to evaluate the need for a safety instrumented function (SIF), evaluate potential system architectures and analyze the system to determine its predicted performance, from both a risk reduction and reliability standpoint.



IN PERSON



See website
for locations



\$1195



2 days

VIRTUAL



Global



\$1195



2.5 days

PRIVATE



Onsite / Virtual



Request Quote



2 days

WHO SHOULD ATTEND?

- Those who will be involved in the design, evaluation, operation and maintenance of safety instrumented systems

WHAT WILL I LEARN?

- Learn how to design, specify and evaluate performance of safety instrumented functions within a safety instrumented system
- Learn the importance of good maintenance procedures for the integrity of your systems
- Gain an understanding of the regulatory requirements for safety instrumented systems
- 1.4 Continuing Education Units (CEU)

**COMBINE C200 & C210
TO SAVE 20%**



Root Cause Analysis Courses

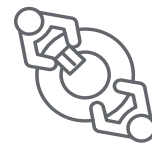
Our Root Cause Analysis courses are designed to support organizations to get to the bottom of their incidents and prepare mitigation strategies to prevent future incidents.

C120: Root Cause Analysis and Incident Investigation

ABOUT THIS COURSE

Learn to use the license-free SOURCE™ root cause analysis (RCA) methodology for investigating incidents. This methodology will help you initiate a RCA incident investigation, gather data for investigating all types of incidents, collect data through interviews and parts analyses and apply powerful techniques (timelines, cause and effect trees, Root Cause Map™ and 5-whys) for causal factor and root cause identification.

Avoid future incidents by developing appropriate recommendations using our four-level recommendation development guidance to address each of the causal factors and root causes, structure reports for optimum effectiveness, develop your data-trending process to identify systemic problem areas and more.



IN PERSON



See website
for locations



\$1745



3 days

VIRTUAL



Global



\$1745



5 days

PRIVATE



Onsite / Virtual



Request Quote



5 days

WHO SHOULD ATTEND?

- Anyone who needs to learn incident investigation skills
- Anyone who needs to know how to meet requirements of standards and regulations for investigation of incidents with safety, health, reliability, environmental and quality impacts

WHAT WILL I LEARN?

- Learn how to investigate serious and complex incidents and the importance of near-miss investigations, incident classification and data trending
- Learn how to identify root causes (not just causal factors) using proven techniques
- You'll walk away with your course notebook, a copy of our Root Cause Analysis Handbook, our Excel and Visio templates and access to our online resources for your investigations - no licensing fees to pay.
- 2.1 Continuing Education Units (CEU)

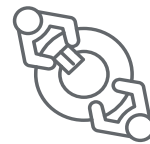
**COMBINE C120 & C126
TO SAVE 20%**

C122: Advanced Root Cause Analysis

ABOUT THIS COURSE

This advanced follow on course to our standard RCA course (C120) allows attendees to learn advanced techniques and gain additional insight from our experienced investigators. We solicit input from each of the participants in advance so we can address the key concerns and issues of each attendee.

You will participate in additional workshops related to timelines, cause and effect trees, interviewing, physical data analysis plans, near-miss definitions and reporting and trending. Attendees also receive an overview of how to structure an effective investigation program for their company, including how to define near misses, train others to recognize and report incidents, classify incidents for assigning the appropriate investigator(s) and trend data. You will take back to your company an example of a successful incident reporting and investigation program.



IN PERSON



See website
for locations



\$1195



2 days

VIRTUAL



Global



\$1195



3 days

PRIVATE



Onsite / Virtual



Request Quote



2 days

WHO SHOULD ATTEND?

- Those who need to know the importance of near-miss investigations, incident classification and data trending
- Those who need to be equipped to investigate serious, complex incidents
- Those who want additional workshops in areas such as causal factor charting, cause and effect trees, etc.

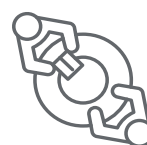
WHAT WILL I LEARN?










- Identify root causes (not just causal factors) with proven techniques
- Collect data through interviews and physical data analyses – numerous workshops are used to reinforce these topics
- Apply powerful techniques for causal factor identification, including causal factor charting, cause and effect trees, change analysis and timelines
- Use ABS Group's Root Cause Map™ to aid in root cause identification
- Avoid future incidents by developing appropriate recommendations to address causal factors and root causes
- Structure reports for optimum effectiveness
- Develop your data-trending process to identify systemic problem areas
- 1.4 Continuing Education Units (CEU)

ABOUT THIS COURSE

Learn this next generation root cause analysis (RCA) method and tool to reactively assess and understand cultural issues that led to a major accident or series of incidents. The Cultural Cause Analysis™ (CCA) method deepens your ability to assess the underlying behaviors, actions and cultural issues that allowed management system weaknesses (root causes) to exist and led to equipment or human performance gaps that caused an incident(s).

The CCA approach was developed by the same authors of Root Cause Analysis: A Guide to Efficient and Effective Incident Investigations and the authors of the Center for Chemical Process Safety (CCPS) book, Guidelines for Risk Based Process Safety, which is recognized globally by high-hazard industries as the benchmark for process safety management (PSM) practices.



IN PERSON	VIRTUAL	PRIVATE
 See website for locations	 Global	 Onsite / Virtual
 \$1195	 \$1195	 Request Quote
 2 days	 3 days	 2 days

WHO SHOULD ATTEND?

- Anyone who needs to build on their incident investigation and root cause analysis skills
- Anyone searching to better identify underlying behaviors, actions and cultural issues driving performance issues
- Anyone who seeks to influence culture to drive enhanced performance

WHAT WILL I LEARN?

- How to investigate cultural drivers of serious and complex incidents
- How to identify cultural causes
- The importance of culture data trending
- To balance the return-on-investment for what type of causal analysis and when
- How Big Data supports the 12 Essential Features of Culture
- Come away from the course with your course notebook, access to ABS Group's extensive online resources, a Root Cause Map™ and a Cultural Cause Map™ for your company.
- 1.4 Continuing Education Units (CEU)

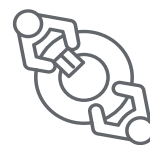
**COMBINE C120 & C1026
TO SAVE 20%**

C140: Human Error Prevention

ABOUT THIS COURSE

Attendees learn how to examine and categorize specific human errors to identify the conditions and situations that contributed to mistakes. Attendees also discover why most human mistakes and human factors are caused by error-likely situations, which typically stem from weaknesses in the policies/practices that influence how organizations select, train, supervise, communicate with and design workplaces for workers. You will learn how to apply several human performance assessment tools, including error-likely situation checklist analyses, walkthrough analyses, guideword analyses, risk-reward analyses and ABC (antecedent-behavior-consequence) analysis. You will participate in several workshops so you will be able to apply these tools immediately.

We will also discuss the advantages and disadvantages of each approach so you will know when and where to apply each of these approaches. Finally, we will talk about how to integrate these tools and approaches into equipment designs, incident investigations, management of change and proactive analyses (e.g., PHAs, FMEAs).



IN PERSON



See website
for locations



\$1195



2 days

VIRTUAL



Global



\$1195



3 days

PRIVATE



Onsite / Virtual



Request Quote



2 days

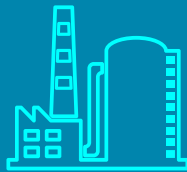
WHO SHOULD ATTEND?

- Those seeking techniques to analyze facilities, systems and operations proactively and reactively
- Those seeking new prevention and mitigation approaches to solve human performance problems

WHAT WILL I LEARN?

- Learn the underlying reasons why human errors occur
- Learn how to correct human performance issues before they cause problems
- Learn how to assist others in your organization in dealing with human performance in your operations
- 1.4 Continuing Education Units (CEU)

**COMBINE C120 & C140
TO SAVE 20%**

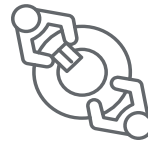


Facility Siting Courses

Our Facility Siting courses support organizations to understand the complex requirements of the API 752/753/756 regulations.

ABOUT THIS COURSE

This course addresses the regulatory requirements for facility siting and gives an overview of the methods to satisfy the requirements. It specifically reviews the American Petroleum Institute (API) recommended practice (RP) documents 752 (Management of Hazards Associated with Location of Process Plant Permanent Buildings), 753 (Management of Hazards Associated with Location of Process Plant Portable Buildings) and 756 (Management of Hazards Associated with Location of Process Plant Tents). These documents give guidance for managing the risk from explosions, fires and toxic material releases to on-site personnel located in permanent or portable buildings. The course is a management-level overview.



IN PERSON



See website
for locations



\$655



1 day

VIRTUAL



Global



\$655



2 days

PRIVATE



Onsite / Virtual



Request Quote



1 day

WHO SHOULD ATTEND?

- Those who must perform facility siting assessment needs
- Those who must manage facility siting needs
- Those who must review facility siting needs

WHAT WILL I LEARN?

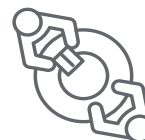
- Look specifically into API RP 752, 753 and 756 documents
- Gain an overview of the requirements and review the methods needed to satisfy them
- Learn what those results and recommendations could mean to your company
- 0.7 Continuing Education Units (CEU)

**COMBINE C217 & C240
TO SAVE 20%**

C240: Facility Siting Hazards Analysis Techniques

ABOUT THIS COURSE

Learn what you need to do to satisfy the hazards analysis portion of OSHA facility siting requirements using either a consequence or risk-based approach. This technical course is designed for the process safety professional who performs facility siting studies. Students should bring a calculator or computer.



IN PERSON



See website
for locations



\$1195



2 days

VIRTUAL



Global



\$1195



3 days

PRIVATE



Onsite / Virtual



Request Quote



2 days

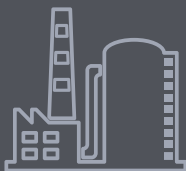
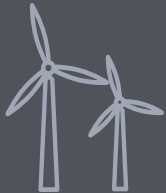
WHO SHOULD ATTEND?

- Those who must perform facility siting hazard analyses
- Those who review facility siting hazard analyses performed by others
- Those who supervise engineers that perform facility siting hazard analyses

WHAT WILL I LEARN?

- How to apply techniques for calculating the effects from fire and toxic hazards, including evaluating the vulnerability of personnel evacuations
- How to apply blast curve techniques for calculating vapor cloud explosions, pressure vessel bursts, boiling liquid expanding vapor explosions and chemical runaway or decomposition reactions
- Understand when more detailed analysis techniques such as Computational Fluid Dynamics may be of benefit
- Understand how blast loads are applied to buildings and their specific vulnerabilities
- Learn about different dynamic analysis methods including material properties and response criteria
- Understand non-structural and window glass fragment hazards including basic mitigation techniques
- 1.4 Continuing Education Units (CEU)

**COMBINE C217 & C240
TO SAVE 20%**



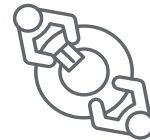
ISO Standard Courses

Our ISO Standard courses are available to those wishing to become a lead auditor for ISO 9001, 14001 and 45001.

C600: Certified ISO 9001 Lead Auditor

ABOUT THIS COURSE

This ISO 9001 training course is certified by Exemplar Global and is presented in partnership with Pillar Management Associates (the certified course provider). This course is designed for those who plan and/or conduct audits of quality management systems under the ISO 9001:2015 standard. This course satisfies the training requirement for ISO 9001:2015 Lead Auditor certification.



IN PERSON



See website
for locations



\$2195



2.5 days

VIRTUAL



Global



\$2195



2.5 days

PRIVATE



Onsite / Virtual



Request Quote



2.5 days

WHO SHOULD ATTEND?

- Those planning and/or conducting audits of quality management systems under the ISO 9000 standard

WHAT WILL I LEARN?

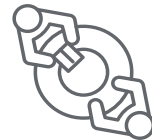
- The benefits of documented quality assurance systems
- Gain knowledge of the ISO 9001 and ISO 19011 requirements
- Understand the principles and methods of performing audits against ISO 9001
- Learn how to prepare, perform and lead an audit as well as how to evaluate and report audit findings
- 2.6 Continuing Education Units (CEU)

**COMBINE WITH C340 OR C820
FOR ADDITIONAL SAVINGS**

C340: Certified ISO 14001 Lead Auditor

ABOUT THIS COURSE

This ISO 14001 Lead Auditor Training Course course is certified by Exemplar Global and is presented in partnership with Pillar Management Associates (the certified course provider). The course satisfies the training requirement for ISO 14001:2015 Lead Auditor certification.



IN PERSON



See website
for locations



\$2195



2.5 days

VIRTUAL



Global



\$2195



2.5 days

PRIVATE



Onsite / Virtual



Request Quote



2.5 days

WHO SHOULD ATTEND?

- This course is designed for those who will be planning and/or conducting audits of environmental management systems (EMSs) against the international ISO 14001 standard

WHAT WILL I LEARN?

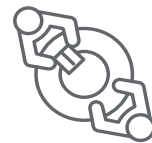
- Understand the benefits of documented EMS
- Gain knowledge of the requirements of ISO 14001
- Understand the principles and methods of performing audits against ISO 14001
- Be able to prepare, perform and lead an audit
- Learn how to evaluate and report audit findings
- See how to apply for Lead Auditor certification
- 2.6 Continuing Education Units (CEU)

**COMBINE WITH C600 OR C820
FOR ADDITIONAL SAVINGS**

C820: Certified ISO 45001 Lead Auditor

ABOUT THIS COURSE

This ISO 45001 lead auditor training course is certified by Exemplar Global and is presented in partnership with Pillar Management Associates (the certified course provider). This training is for those occupational health and safety (OH&S) professionals who wish to become auditors for the internationally accepted norms and regulations relating to the ISO 45001 standard.



IN PERSON



See website
for locations



\$2195



2.5 days

VIRTUAL



Global



\$2195



2.5 days

PRIVATE



Onsite / Virtual



Request Quote



2.5 days

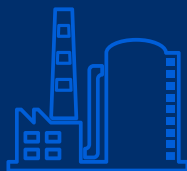
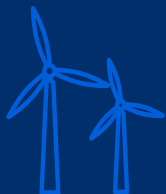
WHO SHOULD ATTEND?

- OH&S professionals who wish to become auditors using ISO 45001 standards

WHAT WILL I LEARN?

- Meet the training requirements for auditor certification for OH&S audits
- Learn and practice audits
- Understand the requirements of the ISO 45001 OH&S standard
- Integrate OH&S audits with other management system audits
- Benefit from the lessons learned by experienced auditors
- 1.9 Continuing Education Units (CEU)

**COMBINE WITH C340 OR C600
FOR ADDITIONAL SAVINGS**



Combined Courses

Our combined course option allows you to get the most out of our training solutions by providing coinciding industry courses that offer considerable savings.

Combined Courses

Interested in more than one of our courses? Some of our courses are available as a combined course option at a discounted rate.

The courses available within this offer are:

Codes	Combined Courses	Savings
100 / 101	Process Safety Management Compliance and Compliance Auditing	20%
110 / 110 D	Process Hazard Analysis Leader and Dust Hazards Analysis	20%
111 / 113 / 114	Management of Change, Revalidating Process Hazard Analyses and Advanced PHA Leader	20%
120 / 126	Root Cause Analysis, Incident Investigation and Cultural Cause Analysis	20%
120 / 122	Root Cause Analysis, Incident Investigation and Advanced RCA	20%
120 / 140	Root Cause Analysis, Incident Investigation and Human Error Prevention	20%
200 / 210	Layer of Protection Analysis and Safety Integrity Level	20%



About ABS Group

ABS Group of Companies, Inc. (www.abs-group.com), through its operating subsidiaries, provides technical advisory and certification services to support the safety and reliability of high-performance assets and operations in the oil, gas and chemical, power generation, marine, offshore and government sectors, among others. Headquartered in Houston, Texas, ABS Group operates with more than 1,000 professionals globally. ABS Group is a subsidiary of ABS (www.eagle.org), a leading marine and offshore classification society.

Disclaimer: The information contained in this catalog is accurate as of the date of publication, however the details and pricing of the offerings listed herein remain subject to change at any time and may further vary depending on the number of attendees. Please refer to www.training.abs-group.com for the most up to date information concerning our current course offerings.

ABS Group refers to various subsidiaries of ABS Group of Companies, Inc., including ABSG Consulting Inc. © Copyright 2022 ABSG Consulting Inc. All rights reserved. 10/22



traininginfo@abs-group.com
enquiriesuk@abs-group.com

www.abs-group.com



ABS Group