

PII's 2020 Public Course Calendar (Rev. 8)

Course Title	Typical Course Attendees	Fees (in USD)/ Duration	Jan. '20	Feb. '20	Mar. '20	Apr. '20	May '20	June '20	July '20	Aug. '20	Sept. '20	Oct. '20	Nov. '20	Dec. '20
<p><u>Course 1</u> Overview of Process Safety Management (PSM) Reviews all elements of PSM for compliance and best practices. Excellent for workers.</p>	<ul style="list-style-type: none"> Workers – Operations, Maintenance, Lab, support staff Engineers – Process, Safety, and Mechanical Environmental Management and Technicians 	1 day	<i>(only offered as a private course at client site)</i>											
<p><u>Course 2</u> Process Safety Management (PSM) Detailed description of each PSM element and how these interrelate. Some exercises and many examples. Great starter for PSM implementers.</p>	<ul style="list-style-type: none"> Managers – Operations, Safety, Environment, and Executive Engineers – Process, Safety, and Mechanical PSM Implementation Team Members – Anyone involved with implementation Compliance Auditors 	\$1,350 – 3 days in USA or by Distance Learning \$1,995 – 3 days in Dubai		3-5 Char.		27-29 (Distance Learning)		22-24 (Distance Learning)			14-16 (Distance Learning)		15-17 Dubai	8-10 (Distance Learning)
<p><u>Course 3</u> Compliance Auditing for Process Safety Details of how to perform an audit (gather and analyzing data), using PSM elements as the focus.</p>	<ul style="list-style-type: none"> PSM Implementation Team Members Managers – Operations, Safety, Environment, and Executive Engineers – Process, Safety, and Mechanical Compliance Auditors 	\$1,100 – 2 days in USA or by Distance Learning \$1,495 – 2 days in Dubai				Apr. 30 – May 1 (Distance Learning)					29-30 (Distance Learning)		18-19 Dubai	
<p><u>Course 4</u> Incident Investigation & Root Cause Analysis Leadership In-depth explanation and hands-on workshops for perspective investigators and analysts, cover all aspects and all activities. Uses the best practices from industry.</p>	<ul style="list-style-type: none"> Engineers – process, process safety, and mechanical Operations and Maintenance Staff – senior operators, maintenance technicians, supervisors Process reliability staff Process quality control/assurance staff 	\$1,350 – 3 days in USA or by Distance Learning \$1,995 – 3 days in Dubai				6-8 (Distance Learning)	18-20 (Distance Learning)			12-14 (Distance Learning)		28-30 (Distance Learning)	8-10 Dubai	9-11 (Distance Learning)
<p><u>Course 4-O</u> Incident Investigation & Root Cause Analysis Overview Overview for workers or management who may participate in investigations.</p>	<ul style="list-style-type: none"> Operations and Maintenance Staff, process reliability, and process quality control/assurance staff who may be team members Managers who must ensure active participation on investigation and RCA processes 	1 day	<i>(only offered as a private course at client site)</i>											

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<p>Course 5 Writing Effective Operating and Maintenance Procedures</p> <p>Following the rules taught in this course will prevent human error. This course is designed for writers (operators, maintenance workers, etc.).</p>	<ul style="list-style-type: none"> Senior Operations and Maintenance Technicians are the primary targets of this course, since they should write their procedures and take ownership of them (maintenance technicians need only to attend the first day) Engineers – Process, Safety, and Mechanical PSM and Quality Compliance Auditors 	\$950 – 2 days in USA or by Distance Learning			23-24 Knox.					3-4 (Distance Learning)					
<p>Course 6 Mechanical Integrity</p> <p>Explains how to comply with the MI requirements within PSM, as well as how to mesh MI with reliability. Many workshops.</p>	<ul style="list-style-type: none"> Designated employee responsible for designing, developing, and implementing a PSM-based MI program Engineers – Mechanical & Plant & Reliability Managers – Plant Manager, Maintenance, and Production PSM Manager or Coordinators 	\$950 – 2 days in USA or by Distance Learning \$1,495 – 2 days in Dubai			25-26 Knox.					5-6 (Distance Learning)		11-12 Dubai			
<p>Course 7 Management of Change and PSSR</p> <p>In-depth explanation and workshops on managing changes to procedures, equipment, etc., including how to do simple hazard reviews and explains pre-startup safety reviews.</p>	<ul style="list-style-type: none"> Technical Managers and Supervisors HSE professionals Quality control managers and staff Engineers PSM coordinators Most other staff who are involved with designing, implementing, tracking, and evaluating MOC programs 	\$950 – 2 days in USA or by Distance Learning		6-7 Char.				25-26 (Distance Learning)							
<p>Course 8 PHA/HAZOP Leadership</p> <p>The best course on how to lead and scribe hazard evaluations; taught by experts who have led hundreds of PHAs. For people who will be leading/scribing.</p>	<ul style="list-style-type: none"> Process engineer or project engineer Operations supervisor PSM coordinator EH&S Managers & Engineers 	\$2,500 – 5 days in USA or by Distance Learning \$2,995 – 5 days in Dubai							13-17 (Distance Learning)		12-16 (Distance Learning)	1-5 Dubai			
<p>Course 8-0 PHA/HAZOP Overview</p> <p>Review of the requirements and methods. Ideal for managers or for team members.</p>	<ul style="list-style-type: none"> Operations and Maintenance Staff, process reliability, and process quality control/ assurance staff who may be team members Managers who must ensure active participation in PHA and hazard reviews (HAZOPs, etc.) 	1 day	(only offered as a private course at client site)												

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<p>Course 9 PHA Revalidation</p> <p>Best, proven methods for revalidating PHAs/ HAZOPs. For experienced PHA leaders.</p>	<p>This course is primarily for PHA leaders, but anyone with the following background will also find the course valuable:</p> <ul style="list-style-type: none"> • Process engineer • PHA element coordinator/manager • PSM coordinator and auditors • EH&S Managers & Engineers 	\$950 – 2 days in USA or by Distance Learning											5-6 (Distance Learning)	
<p>Course 10 Human Error Prevention</p> <p>Covers all of the reasons why human make mistakes and why they develop habits (good and bad) and explains how to optimize each factor to control human error.</p>	<ul style="list-style-type: none"> • Managers – Operations, Safety, Environment, and Executive • Production Supervisors • Training Managers • Engineers – Process, Safety, and Mechanical • PSM Coordinators and Managers • PHA (hazard review) Leaders and Incident Investigators 	\$1,100 – 2 days in USA or by Distance Learning				9-10 (Distance Learning)	21-22 (Distance Learning)		10-11 (Distance Learning)		26-27 (Distance Learning)		7-8 (Distance Learning)	
<p>Course 11 Layer of Protection Analysis (LOPA)</p> <p>Thoroughly explains how to perform LOPA to judge risk and to determine the proper SIL. Taught by one of the 3 primary authors of the industry textbook on LOPA.</p>	<p>This course is designed for experienced PHA/HAZOP leaders, however, others will benefit from learning this simpler method for estimating risk. Only individuals with a strong technical background (such as engineers and scientists) should attend. Others who may benefit from this course include:</p> <ul style="list-style-type: none"> • Managers – Operations, Safety • Project Managers • Engineers – Process, Safety, and Mechanical • PSM Coordinators and Managers 	\$1,200 – 2 days in USA or by Distance Learning		3-4 Knox.						14-15 (Distance Learning)			14-15 (Distance Learning)	

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<p><u>Course 12</u> Safety Instrumented Systems (SIS & SIL)</p> <p>Explains how to determine when a SIF is needed, determine the proper SIL, specify and design and SIS, verify the SIL, and install and maintain and validate the SIF/SIL. Taught by one of the developers of SIL verification standards.</p>	<p>This course is designed for those needing to learn what are SIS, and especially those wanting to learn how to verify SIL design and install and validate SIS/SIL. The course workshops focus primarily on SIL verification and design. The coverage of SIL determination is minimal since Course 8 and Course 11 cover this topic in topic in detail. Consider taking this course in conjunction with Course 11, LOPA. Those who may benefit from this course include:</p> <ul style="list-style-type: none"> • Managers – Operations, Safety • Project, Engineering, and Technical Managers • Engineers – Instrumentation, Electrical, Process, Safety, and Mechanical • Technicians/Specialist - instrumentation • PSM Coordinators and Managers 	\$1,200 – 2 days in USA or by Distance Learning		5-6 Knox.							16-17 (Distance Learning)			16-17 (Distance Learning)
<p><u>Course 13</u> Job Safety Analysis (JSA)</p> <p>Detailed procedures and workshops to teach workers and supervisors how to perform JSAs.</p>	<ul style="list-style-type: none"> • This course is for anyone involved in operations and maintenance that needs to know how to perform JSAs of new or existing tasks. Ideal for all operators and maintenance workers • In addition, full-time safety practitioners, safety committee members, safety coordinators, safety specialists, safety managers, loss control managers, and operations managers can benefit from this course 	3.5 hours (2 sessions offered each day)	(only offered as a private course at client site)											
<p><u>Course 14</u> Human Error Prevention - For Workers</p> <p>A customizable course to explain human errors to workers, with options to provide tools for controlling errors (such as JSA, STAR, etc.).</p>	<ul style="list-style-type: none"> • This course is for anyone involved in operations, maintenance, lab, utilities, and other support areas to a process, with direct hands-on responsibilities. Ideal for all operators and maintenance workers • In addition, full-time safety practitioners, safety committee members, safety coordinators, safety specialists, safety managers, loss control managers, and operations managers can benefit from this course 	1-3 days, depending on needs	(only offered as a private course at client site)											

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<p><u>Course 15</u> Safety Task Action Reporting (STAR)</p> <p>Workshops to teach workers how to control bad habits in the workplace.</p>	<ul style="list-style-type: none"> This course is for anyone involved in operations, maintenance, lab, utilities, and other support areas to a process, with direct hands-on responsibilities. Ideal for all operators and maintenance workers In addition, full-time safety practitioners, safety committee members, safety coordinators, safety specialists, human resources, safety managers, loss control managers, and operations managers can benefit from this course 	<p>1 day - worker course 1-day - managers course</p>												
<p><u>Course 16</u> Behavior-Based Management for Safety and Reliability (Behavior-Based Error Reduction)</p> <p>Best practices from lessons learned in the past 20 years of implementing effective methods for controlling habits. Can include a module on implementing STAR.</p>	<ul style="list-style-type: none"> This course is for anyone involved in operations, maintenance, lab, utilities, and other support areas to a process, with direct hands-on responsibilities. Ideal for all operators and maintenance workers In addition, full-time safety practitioners, safety committee members, safety coordinators, safety specialists, human resources, safety managers, loss control managers, and operations managers can benefit from this course. 	<p>2 days</p>												
<p><u>Course 17</u> Selecting the Right Manufacturing Improvement Tools</p> <p>Compares each of the latest approaches to reliability and manufacturing improvement, such as TMP, Six Sigma, Lean Manufacturing, RCA, Predictive Maintenance, Kaizen, etc.</p>	<p>This course is for anyone who leads or influences the direction and success of manufacturing plants, such as VPs of manufacturing and reliability, reliability and operations management, and reliability technical staff</p>	<p>1-2 days, depending on needs</p>												
<p><u>Course 18</u> Reliability Leadership for Manufacturing Excellence</p> <p>Learn excellence in manufacturing practices that are patterned after the best-in-class manufacturing companies.</p>	<ul style="list-style-type: none"> This course is for managers of production, maintenance, and corporate executives; reliability, process, and safety engineers Anyone who leads or influences the direction and success of manufacturing plants 	<p>1-2 days, depending on needs</p>												

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Notes:

Schedules and course fees are subject to change. Except as indicated, all prices are for Distance Learning or USA locations. Knox. = Knoxville, Tennessee • Char. = Charlotte/Gastonia, North Carolina • Napa = Napa/San Francisco, California • Bahrain or Dubai (UAE) • Distance Learning (Online)

Courses with software do not include software licenses; these require separate purchase and can be licensed after the course.

Please follow the links for these locations to see full descriptions for these courses and to learn how to register.

Private (on-site) courses are usually less costly overall for class sizes larger than 6; these are normally priced per class-day with recommended class size limits. Call or email for details.

Fees and Payments:

Fees quoted in this calendar are valid until PII's next training advertisement is issued. You may pay by company check, VISA®, MasterCard®, American Express®, or bank/wire transfer. If you register by purchase order, we will invoice upon receipt of the order. *All course fees are in US Dollars and are due before the course begins.*

If you are paying by company check, send payments to Process Improvement Institute, 1321 Waterside Lane, Knoxville, TN 37922 USA.

Onsite course fees include all manuals, course materials, lunches, and refreshments throughout the day. Fees do not include accommodations or transportation; however, course confirmation will include details regarding the host-hotel, from which registrants will call to book and pay for their guest accommodations. *For Distance Learning courses, all course materials will be provided electronically.*

Contact PII by phone at 1.865.675.3458 or by e-mail at WBridges@piii.com or EHyde@piii.com with any questions.

Transfers and Cancellations

Early registration helps ensure your place in our limited-enrollment courses. Registrants unable to attend a course may send a substitute, enroll in the next scheduled class, or request a refund up to 2 weeks before the class begins. If it becomes necessary to change or cancel any course, PII will notify you at least 2 weeks before the course date. If a course is cancelled, PII will promptly refund your full tuition if you do not wish to transfer to one of the next offered courses. PII reserves the right to change the date or location of a course and to substitute instructors with equivalent qualifications if unforeseen circumstances arise. We recommend you NOT make non-refundable travel plans until the course date has been confirmed to you by e-mail (no later than 2 weeks before the course start date).