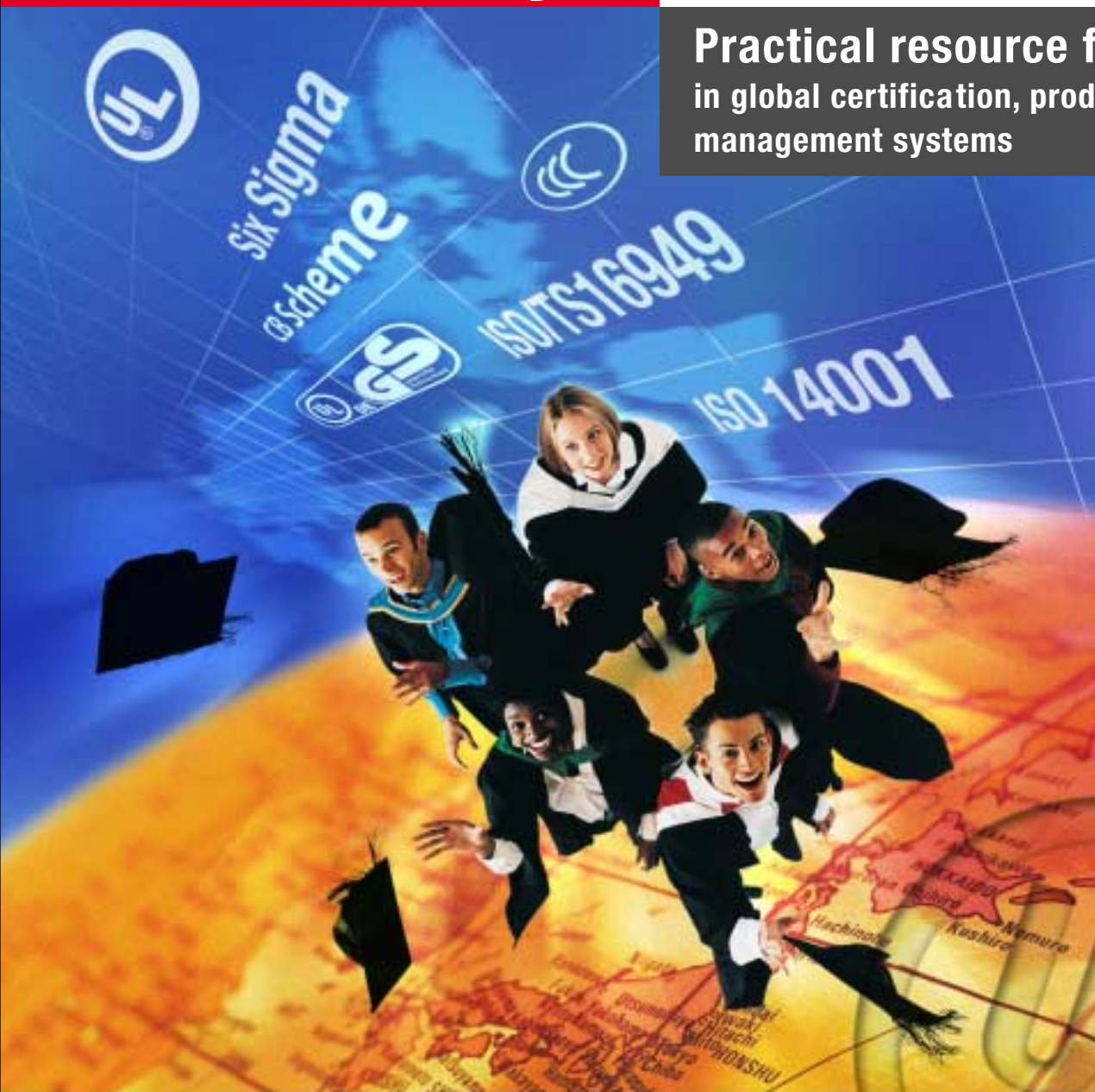**Underwriters Laboratories Inc.®**

UL University

Practical resource for knowledge
in global certification, product safety, and management systems

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UL's technical seminars are designed by professional engineers and system experts for engineering staff and decision makers who need to:

- *Stay fully up-to-date with changes and trends in global standards and business management systems and practices*

- *Gain practical know-how in product safety design from industry experts and veteran engineers*

- *Learn proven tools and techniques to instill quality and safety disciplines in your organization*

- *Learn the proper step-by-step process of identifying and solving problems in your business management processes*

Take advantage of our knowledge tradition

UL has trained and qualified several generations of safety engineers, who are now recognized as the best in the world. Today, we open the doors of the UL University to you. When you attend one of our newly developed programs or our customized courses, you will experience the same rigorous UL training discipline that our engineers go through based on the ideal mix of lectures on technical concepts, real-world case studies, workshops, and hands-on laboratory exercises.

UL University offers seminars in three areas :

1. Product Safety and Compliance
2. Business Management Systems
3. Business Solutions

UL Private Seminars

Need training on topics of special interest? Contact our Customer Service to schedule a customized, private seminar that addresses your specific training needs.

Product Safety and Compliance

UL University features the following product safety and compliance seminars:

Get acquainted with the latest compliance requirements applicable to your industry and gain insights into the certification schemes of your target markets.

Training on Product Safety Requirements

Seminar Categories :

- Information Technology and Telecommunications Equipment (ITE)
- Audio Video (A/V) and Musical Instruments
- Wire and Cable
- Household Appliances
- Personal Appliances
- Lighting / Portable Lamps
- Switches
- Printed Wiring Boards (PWB)
- Plastics

What you'll learn :

- Overview of certification process
- Scope of UL standards
- Compliance requirements
- Factory testing equipment inspection
- What and how critical tests are conducted in the laboratory
- Updates on applicable standards

Training on UL Follow-Up Services (FUS)

What you'll learn :

- UL Inspection program — Types of inspections (including Type L, Type R, On-Call Service, and Initial Production Inspection or IPI), frequency of inspections, and general inspection requirements

- UL FUS processes — Inspection elements, FUS Procedure, Client Document Access (CDA), traceability requirements and the responsibilities of the UL Representative including those of the applicant and manufacturer

- Production-line testing — Explanation of calibration requirements including verification tests and the required documentation

- Control of the UL Mark — Description of the manufacturer's responsibilities regarding the use of the UL Mark and the consequences of misuse of the Mark.

- Inspection Documents — Explanation of the Inspection report, data sheet, and variation notice (VN)

- An overview of UL product safety certification programs

Training on International Market Access

What you'll learn :

- Overview of the mandatory China Compulsory Product Certification (CCC) System — including the submittal process to obtain the CCC Mark and information about how to leverage your CB Test Reports and Certificates to expedite certification

- Industry-specific case studies on steps and hurdles to obtaining the CCC Mark

- Certification process for obtaining the CCC Mark, exemption certificate and acknowledgement letter from the Certification and Accreditation Administration of the People's Republic of China (CNCA)

- Benefits of using a registered agent

Other market access seminars:

- European compliance systems such as CB Scheme, CE Marking, EMC, ENEC and other voluntary product safety marks
- North American market compliance solutions including the UL Mark and the C-UL Mark
- Market access solutions to Latin America such as the UL BR Mark / INMETRO for Brazil, and the UL AR Mark / S-Mark for Argentina
- Market access solutions to Asia Pacific countries

Business Management Systems

UL University offers insider knowledge on the latest Business Management Systems and associated tools.

Seminars cover a wide variety of Management Systems Standards including but not limited to:

- ISO 9001
- ISO/TS 16949
- ISO 14001
- OHSAS 18001

- TL 9000
- RC 14001
- AS 9100
- eSourcing Capability Model (eSCM)

- ISO 13485
- ISO 17025
- ISO 17799
- Social Accountability Standards

What you'll learn:

UL's seminars on Management System Standards are designed to provide participants with the knowledge base required for effective implementation of the standards within their organizations. Topics covered include:

- Evolution of the standards
- Requirements and intent
- Implementation approach and challenges
- Internal auditing techniques
- Future direction

Why choose UL's Business Management Systems training?

Since 1989, UL has leveraged on its flawless integrity to provide customers with credible and highly valued service in the arena of systems certification. UL's assessments are reputed to be "fair, firm, and objective" thereby resulting in added value to customers. UL's participation in standards development and assessments has given us deep understanding of the intent behind the standards. UL's registration programs are recognized by multiple accreditation agencies across the globe. All these make us the best source for information relating to standards.

Business Solutions

UL University offers leading edge knowledge assisting manufacturing and service industries in all aspects of performance improvement and management.

Topic	Training Module	Course Highlights
Problem solving	Manufacturing problem solving using Design of Experiment (DOE) tools	• Disciplined and systematic problem solving techniques
	Achieving breakthrough improvements through DOE, Failure Mode and Effects Analysis (FMEA) and optimization tools	• DOE Tools • FMEA • Process optimization tools
	Organization-wide deployment of DOE tools for achieving breakthrough improvements — Senior management overview	• Deployment of DOE tools in organizations
	Case studies of chronic problems solved using DOE tools	• Case studies on chronic problems solved using DOE tools
Six Sigma	Six Sigma — Black Belt Training	• Systematic method to achieve breakthrough process improvements using the Define, Measure & Analyze, Improve, and Control (DMAIC) Methodology
	Six Sigma — Green Belt Training	• Core DOE tools
	Six Sigma — Champion Training	• Outline of Six Sigma • Organization structure for effective deployment of Six Sigma
Product design tools	New product development using Advanced Product Quality Planning (APQP) practices	• APQP practices
	Building robust designs using product and design FMEA	• Design FMEA
	Geometric Dimensioning and Tolerancing (GD&T)	• GD&T skills in designing products and interpreting engineering drawings
Core process tools	Manufacturing process design and review using process flow diagrams, FMEA, and control plans	• Process flow diagram • Process FMEA • Control plan
	Process variation analysis and monitoring using control charts	• Variation analysis and monitoring of process using X-bars/R-charts and pre-control charts
	Measurement system analysis — Instrument calibration and Repeatability & Reproducibility (R&R) Studies	• Instrument calibration • R&R Studies
	Quality process tools for process technicians (7 QC Tools)	• 7 QC tools
ISO/TS 16949	Value-added approaches for effective implementation of ISO/TS 16949	• Best approaches for implementing ISO/TS 16949
	Achieving business excellence through effective ISO/TS 16949 Internal Audits	• How to audit the business processes in an organization for ISO/TS 16949
	Tools and techniques for achieving bottom-line results in implementing ISO/TS 16949	• Tools for effective implementation of ISO/TS 16949
Business process tools	Business process mapping and analysis	• Business process mapping • Identification of sequencing and interactions • Identification of controls
	Business policy deployment using the quality operating system approach	• Development of organizational level measures and objectives • Development of a quality policy • Deployment of quality objectives

What you can expect from
UL University's training and workshops

UL has delivered technical training to thousands of customers for over 100 years. UL's qualified instructors not only teach, they also practise their skills on products requiring testing and certification.

UL Private Seminars

Need training on topics of special interest? UL private seminars can be held at your site. By arranging private workshops at your facility, we offer you:

• Information focused on the special certification needs of your product line,

• Expanded treatment of the topics of special interest or concern to you,

• Discussion for managers that highlights both technical and business issues, and

• Specifics about where you want to market your products.

Contact UL's Customer Service to schedule a customized, private seminar that addresses your specific training needs.

If you want to know more about the UL University service, please contact the following:

		Customer Service Hotline	Fax	E-mail
China	UL-CCIC Co., Ltd.			
	Guangzhou Branch	+86-20-8348-6999	+86-20-8348-6606	customerservice.gz.cn@cn.ul.com
	Suzhou Laboratory	+86-512-6808-6400	+86-512-6808-4099	customerservice.sz.cn@cn.ul.com
Hong Kong	UL International Limited	+852-2276-9898	+852-2276-9876	customerservice.hk@hk.ul.com
India	UL India Private Limited	+91-80-5138-4500	+91-80-2520-4407	customerservice.in@in.ul.com
Japan	UL Apex Co., Ltd.	+81-45-342-1200	+81-45-342-1601	customerservice.jp@jp.ul.com
Korea	UL Korea, Ltd.	+82-2-2009-9114	+82-2-2009-9471	customerservice.kr@kr.ul.com
Malaysia	UL Services (Malaysia) Sdn. Bhd.	+603-5632-5922	+603-5632-5923	customerservice.my@my.ul.com
Singapore	UL International Services Limited, Singapore Branch	+65-6274-0702	+65-6271-3867	customerservice.sg@sg.ul.com
Taiwan	UL International Services Limited, Taiwan Branch	+886-2-2896-7790	+886-2-2891-7430/ 7431	customerservice.tw@tw.ul.com

Underwriters Laboratories Inc. ®

www.UL-asia.com