### Orica Engineering Training Courses



Orica Engineering

**HAZOP Training Courses** 

**T**raining **I**nformation

## Over 50 Years of In-house Knowledge to Share with You

Since developing the HAZOP technique in the early 1960's, ICI has provided HAZOP training to tens of thousands of people throughout the world. Orica (formerly ICI Australia) continues to provide the following popular and highly respected HAZOP training courses:

- λ Basic HAZOP (2 days)
- λ HAZOP Leader (2 days)
- λ Combined Basic and HAZOP Leader Course (3 days)

Throughout each course, 50 years of in-house knowledge is shared with the course participants from highly respected and experienced course presenters.

Each presenter is **accredited** by Orica. Also, they are frequently approved as HAZOP leaders for major developments as per the internal requirements of Orica and by some of our State legislators, for example, by the NSW Department of Planning and Environment.

All programs are facilitated using a mixture of presentations, class discussion, practical exercises and case studies. The experience and background of the presenters ensures that courses are directly relevant to all participants. The courses are all structured from a *practical industrial perspective*.

Our presenters maintain close association with industry, government and universities which ensures that our courses reflect the latest in HAZOP thinking. For example, recent additions include key issues as embodied within **AS 61882** (the HAZOP Application Guide), current Orica HAZOP and Hazard Study techniques, HAZOP study requirements with respect to Major Hazard Facility legislation and various unique processing and design examples where the HAZOP technique has been successfully applied.

The courses have been presented externally to industry and government around the world for 25 years and form the pillars of Australian HAZOP study methodology today.

The courses are run either in-house or, for the Basic and Leader courses, via a public venue. If requested, courses can be *customised* to meet your demands.

See overleaf for details of the two most popular courses; Basic HAZOP and HAZOP Leader. Details of the other risk courses are available upon request.

For further information please see our website <a href="www.planager.com.au">www.planager.com.au</a> or contact the following people:

 Sydney:
 Karin Nilsson
 Ph (61 2) 9427 7851

 Brisbane:
 Dean Shewring
 Ph (61 2) 9913 7284

 Melbourne, Adelaide, Perth:
 Myrna Hepburn
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## Orica Engineering Training Courses

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	Basic HAZOP (HAZB)	HAZOP Leader (HAZL)
Aim:	A course dealing with the identification of potential hazards in both process design and operation using the open ended questioning technique of Hazard and Operability (HAZOP) Study designed to give the attendees the skills to participate effectively in a study.	To provide participants with the extra skills needed to lead successful Hazard and Operability studies for processing industries.
Who should attend:	HAZOP is a team process and can involve people at all levels of the organisation from shop floor to senior managers. The course is designed to satisfy all potential participants, e.g. engineers, project managers, operators, maintenance technicians, safety, health and environmental personnel, chemists and process designers.	The course is designed for technical managers, plant managers, design engineers and project engineers who have been trained in HAZOP techniques and gained practical experience by participating in studies. Previous training in basic HAZOP study techniques and/or significant practical experience in HAZOP studies is required.
How will they benefit:	Participants will learn how to take an active role in HAZOP studies so that studies can be planned and undertaken effectively and efficiently. They will also learn how to recognise the warning signs of a deficient study.	On completion of this course, participants will have sufficient understanding of and practice in the disciplines required for leading a HAZOP, so that in their particular business environment, they will be able to maximise the value of the HAZOP process for identifying potential hazards and assessing solutions.
Content and Structure:	<ul> <li>Basic philosophy supporting HAZOP studies</li> <li>Objectives of HAZOP studies</li> <li>HAZOP study process and its history</li> <li>Guide Words for different operations</li> <li>Selection of study team</li> <li>HAZOP preparation</li> <li>Conduct of a study</li> <li>Minutes and reporting</li> <li>Case Studies</li> <li>Human Factors</li> <li>Plant modifications</li> <li>Orica's Hazard Studies 1 to 6</li> </ul>	<ul> <li>Review of basic HAZOP skills</li> <li>HAZOP team leadership skills</li> <li>Guide Word development for novel processes</li> <li>Application to batch systems (Batch HAZOP studies)</li> <li>Detailed planning for effective HAZOP</li> <li>Protective systems importance in HAZOP</li> <li>Complementary HAZOP techniques, e.g. fault and event tree analysis</li> <li>Ensuring HAZOP quality</li> <li>Auditing – self assessment techniques</li> </ul>

### Public Course Schedule

See website: <a href="http://www.planager.com.au/hazop\_training\_dates.asp">http://www.planager.com.au/hazop\_training\_dates.asp</a>

# We Look Forward to Assisting You with Your Training Program.

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