

**INTERNATIONAL STAFF
 TRAINING CENTRE**
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**МЕЖДУНАРОДНЫЙ ЦЕНТР
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ADVANCED TRAINING PROGRAM
Hazard and Operability Study

Duration: 24 h
 Form: off-the-job

№	Topics
1	Risk management (ISO 31000 and 31010 standards): qualitative and quantitative hazard analysis; identification of hazards, analysis of risk level, ranking of risks by priority; the principle of selecting preventive and protective measures to control risks; hierarchy of risk control measures; documenting the risk assessment; review of risk assessment; analysis of examples of the application of risk management processes
2	Structured methods for identifying and analyzing hazards, criteria for choosing an analysis method: HAZID techniques, preliminary risk analysis, “what if” checklists; practical training on the use of HAZID; fault analysis; Practical lesson on performing fault analysis.
3	Failure Modes and Effects Analysis (FMEA): Practical lesson on the application of failure modes and effects analysis
4	HAZOP technique: direction of the HAZOP team; HAZOP working group – number, composition, required competencies and roles of participants; required characteristics of a HAZOP team chair; duties as chairperson of HAZOP group; managing group dynamics; HAZOP procedure; planning and preparation of a HAZOP session – necessary documentation and resources, time, place, group preparation; implementation of HAZOP – breakdown into sections, components, parameters, use of guide words, causes and consequences, recommendations for protective measures; documentation and recording of HAZOP results; practical lesson completing procedure worksheets; HAZOP report – contents.
Final certification (talk)	