

Root Cause Analysis

Purpose

The aim of the course is to introduce the investigation approach for safety, process or system based events, and provide details on various analysis techniques available to identify the root causes whether equipment, human or organisational.

At the end of the course you will be able to

1. Plan an investigation and analysis
2. Choose and apply the most appropriate root cause analysis technique for the adverse event
3. Determine direct, contributing and root causes, and support conclusions logically with facts
4. Determine organisational effectiveness and safety culture weaknesses that promoted or created vulnerability to the adverse event
5. Explain key investigation results and support them in an oral briefing.

Outline content

Six steps for a successful investigation

- Step 1 – Immediate action
- Step 2 – Initiate the investigation
- Step 3 – Collect data
- Step 4 – Organise and analyse data
- Step 5 – Corrective and preventive actions
- Step 6 – Reporting and learning

Root cause analysis techniques

- Cause and effect diagram
- Change analysis
- Event and casual factor chart
- Failure modes and effects analysis (FMEA)
- Fault tree analysis
- Five why's
- Hazard-barrier-target analysis (Tripod)
- Job task analysis
- Management oversight and risk tree analysis (MORT)

Understanding human errors and violations

Understanding organisational effectiveness

Understanding safety culture

Recommended prior study

Education, skills or experience equivalent to undergraduate level

Who should attend

Managers, supervisors and professionals who may be called upon to participate in the investigation and analysis of safety, process or system based events.

Delivery methods

Face-to-face, Distance Learning or Blended Learning

Levels of Assessment

- Attendance only
- Assessment by Risktec
- Postgraduate Qualifications: PgCert, PgDip and MSc

Assessment details

Postgraduate programmes: activities and assignment (total 80 hours)

Other Details

Level: Masters
Duration: 2 days (F2F), 8 weeks (Postgraduate DL)

Price

For prices and further information, or to book a course, please contact **Vicky Billingham** at training@risktec.tuv.com

Contact

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