Behavior-Based Safety and Human Factors Analysis Training Course

25 – 29 July 2027
Johannesburg

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Training Center

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Ref: 1311_196934 **Date:** 25 – 29 July 2027 **Location:** Johannesburg **Fees:** 4500 Euro

Overview

Behavior-Based Safety and Human Factors Analysis Training Course is a one-week advanced course for safety, HSE, operations, supervision, and human-factors personnel who leave with a Behavioral Safety and Human Factors Improvement Portfolio. Participants connect BBS observation and feedback with task, workload, fatigue, culture, and organizational analysis so interventions address behavior without assigning blame. Agile Leaders Training Center presents behavior-based safety and human factors analysis as a system-focused improvement discipline.

Who Should Attend

- Functions responsible for workplace safety strategy and assurance
- Operations teams responsible for task performance and frontline risk controls
- Supervisory groups responsible for observation, coaching, and feedback
- Human-factors specialists responsible for error-likely conditions and work design
- Learning and assurance teams responsible for incidents, indicators, and improvement actions

The course assumes participants already support workplace safety or operational decisions, and it excludes clinical psychology, individual diagnosis, general ergonomics design, and behavior-based discipline or blame.

Departments and Industries

The course supports departments and industries that manage behavior, task conditions, human performance, and safety learning.

- Health, safety, environment, and operational assurance
- Operations, production, maintenance, and shift supervision
- Learning, organizational development, and workforce capability
- Manufacturing, energy, utilities, and process operations
- Transport, logistics, construction, and healthcare services

Learning Objectives

By the end of this course, participants will be able to:

- Analyze behavior within job, individual, and organizational conditions
- Build critical-behavior definitions and reliable observation tools
- Apply antecedent-behavior-consequence analysis to workplace scenarios
- Evaluate workload, fatigue, and error-likely situations
- Use just-culture and learning-team methods to prioritize interventions
- Create indicators and assurance controls for sustained improvement

Course Agenda

Day 1: Behavioral Safety and Systems Context

- BBS Scope and System-Boundary Map
- Job, Individual, and Organization Influence Model
- Critical Behavior Operational-Definition Sheet
- Antecedent-Behavior-Consequence Analysis
- Behavioral Safety Ethics and No-Blame Guardrails

Day 2: Observation and Feedback Quality

- Behavior Observation Sampling Plan
- Observable-Criteria and Inter-Rater Check
- Observation Bias and Data-Quality Review
- Peer Feedback and Coaching Conversation Method
- Behavior Trend and Exposure Dashboard

Day 3: Human Performance Conditions

- Safety-Critical Task Analysis
- Workload Demand and Capacity Assessment
- Fatigue Risk and Shift-Pattern Review
- Error-Likely Situation Identification Map
- Procedure, Interface, and Environment Barrier Analysis

Day 4: Culture, Learning, and Intervention

- Safety Climate Pulse and Evidence Matrix
- Just-Culture Decision and Accountability Test
- Learning Team Question and Insight Guide
- Behavioral and System Intervention Selection Matrix
- Leading Indicator and Action-Effectiveness Plan

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Day 5: Behavioral Safety Improvement Practice

- Exercise: Critical-Behavior and ABC Analysis
- Exercise: Observation Reliability and Feedback Review
- Exercise: Workload, Fatigue, and Error-Likely Situation Assessment
- Exercise: Learning-Team Intervention and Indicator Review
- Capstone Exercise: Behavioral Safety and Human Factors Improvement Portfolio

Practical Exercises

The course uses suggested activities based on manufacturing, logistics, healthcare, and process-operation scenarios.

- Suggested activity: define an observable critical behavior and test it with an antecedent-behavior-consequence analysis.
- Suggested activity: compare observation records for bias, reliability, and feedback quality.
- Suggested activity: map task demand, workload, fatigue, procedures, and workplace conditions around an error-likely situation.
- Suggested activity: convert learning-team insights into system and behavioral interventions with measurable follow-up.

FAQs

What is behavior-based safety and human factors analysis?

Behavior-based safety and human factors analysis combines observation and feedback with analysis of tasks, workload, fatigue, tools, procedures, culture, and organizational conditions that shape workplace behavior.

How should BBS observation avoid worker blame?

BBS observation avoids worker blame by defining observable actions, examining the conditions that influence them, using respectful feedback, protecting data integrity, and selecting system improvements alongside behavioral interventions.

Who suits behavior-based safety and human factors training and what does it assume?

Behavior-based safety and human factors training suits safety, operations, supervision, learning, and assurance personnel. It assumes experience supporting workplace safety or operational decisions.

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How does behavior-based safety and human factors training differ from general safety leadership?

Behavior-based safety and human factors training develops observation, task analysis, workload assessment, learning-team, intervention, and assurance methods. General safety leadership addresses broader direction, governance, and leadership behavior.

Which indicators support behavior-based safety improvement?

Behavior-based safety improvement uses observation reliability, exposure patterns, feedback completion, error-likely conditions, learning themes, corrective-action progress, and intervention-effectiveness indicators rather than relying only on incident counts.

Conclusion

The course integrates BBS observation, feedback, task analysis, workload, fatigue, safety climate, just culture, learning teams, intervention design, and assurance. Participants take back a Behavioral Safety and Human Factors Improvement Portfolio containing definitions, tools, maps, assessments, guides, matrices, dashboards, and action plans. The portfolio supports fairer learning, stronger data, targeted controls, and traceable improvement.