CONCEPT

Urban Search and Rescue and Technical Rescue Course: Collapse, Confined Space and Rope Rescue

25 – 29 January 2027
Dubai - Five-star CBD venue



Urban Search and Rescue and Technical Rescue Course: Collapse, Confined Space and Rope Rescue

Ref: 1632_25895 **Date:** 25 – 29 January 2027 **Location:** Dubai - Five-star CBD venue **Fees:** 19500 SAR

Introduction:

Urban search and rescue and technical rescue, covering collapse, confined space and rope rescue, is a 1-week course for civil defence rescue leadership, industrial emergency response supervision and technical rescue sections, ending with a Technical Rescue Team Capability and Deployment Plan for a case organisation. Many rescue units reach a collapsed building, vessel entry or high-angle casualty without matched skills, shoring stock or safe rotations, so extrication slows and rescuers are exposed. Nominees already lead rescue crews and practise through timed collapse, rope and confined space simulations. CoreConcept Training Center delivers this urban search and rescue course.

Course Objectives:

- Apply the INSARAG methodology to size up a collapse site, run assessment, search and rescue phases and record findings with the INSARAG marking system
- Assess damaged structures by collapse pattern and void type and specify cribbing, raker, vertical and door or window shores before rescuers enter
- Direct victim location using canine, acoustic and camera search with hailing, listening periods and triangulation
- Plan rope rescue systems with anchors, mechanical advantage, edge protection and two-tension-rope rigging for raising and lowering casualties
- Organise confined space rescue with atmospheric monitoring, non-entry retrieval and entry rescue teams standing by
- Prepare a Technical Rescue Team Capability and Deployment Plan covering team typing, rescuer safety, rotations, equipment cache and mobilisation

Target Audience:

- Civil defence rescue team leadership responsible for collapse search, extrication and crew safety
- Technical rescue sections that rig rope systems and carry out high-angle and below-grade recoveries
- Industrial emergency response supervision accountable for confined space standby and rescue at plants and utilities
- Rescue training and readiness staff who set competence levels, drills and team accreditation preparation
- Rescue logistics and equipment staff who maintain shoring stock, tool caches and mobilisation kits

Course Outline:

Day 1: Technical Rescue Landscape, Collapse Hazards and Team Readiness

- Technical Rescue Disciplines and Awareness, Operations and Technician Levels
- Urban Search and Rescue Mission Profile After Sudden-Onset Collapse
- Collapse Void Types Pancake, Lean-To, V and Cantilever
- Rescuer Hazard Profile for Dust, Utilities, Aftershocks and Fatigue
- Rescue Unit Capability Gap Assessment Against Local Risk Profile

Day 2: INSARAG Methodology, Team Typing and Worksite Marking

- INSARAG Guidelines Volumes and National Capacity Building Approach
- INSARAG Light, Medium and Heavy Team Composition and Components
- INSARAG Assessment, Search and Rescue Sequence Across Worksites
- INSARAG Marking System Worksite, Victim and Hazard Symbols
- USAR Coordination Cell Sector Allocation and Reporting Flow

Day 3: Collapse Search, Shoring and Victim Extrication Skills

- Structural Triage and Building Damage Assessment Checklist
- Cribbing, Raker Shore and Vertical Shore Construction Sequence
- Door and Window Shores for Void Entry Stabilisation
- Canine, Acoustic Listening and Search Camera Victim Location
- Breaching, Breaking, Lifting and Moving Concrete Debris Techniques

Day 4: Rope Rescue, Confined Space Rescue and Rescuer Safety Controls

- Rope Rescue Anchor Selection and Load-Sharing Anchor Systems
- Mechanical Advantage Haul Systems and Two-Tension-Rope Rigging
- Confined Space Atmospheric Monitoring and Ventilation for Rescue Entry
- Non-Entry Retrieval Versus Entry Rescue Decision Criteria
- Rescuer Safety Officer, Accountability Tags and Work-Rest Rotations

Day 5: Timed Rescue Simulations and Capability and Deployment Plan

- Collapsed Building Simulation With Marking and Shoring Injects
- Rope and Confined Space Rescue Simulation With Changing Atmosphere
- Rescue Equipment Cache Inventory and Mobilisation Timeline Exercise
- Simulation Debrief Scoring for Speed, Safety and Coordination
- Technical Rescue Team Capability and Deployment Plan Completion

Skills You Will Gain:

- Collapse Site Size-Up
- Structural Shoring Specification
- Void Search and Victim Location
- Rope Rescue System Rigging
- Confined Space Rescue Planning
- Rescuer Safety Management
- Rescue Team Typing
- Equipment Cache Planning

Why Attend This Course:

- Deliver a Technical Rescue Team Capability and Deployment Plan to the head of rescue operations and the emergency readiness committee
- Decide when a void is safe to enter, which shore to build first and when to switch from retrieval to entry rescue
- Avoid secondary collapse injuries, rope system failures and rescuer exposure in toxic or oxygen-deficient spaces
- Brief crews on INSARAG markings, rotation rules and rigging checks so that every shift works to one method

Conclusion:

Back at work, the participant gives the head of rescue operations and the emergency readiness committee a Technical Rescue Team Capability and Deployment Plan for the organisation's rescue unit. Leaders use it to decide team typing, staffing per shift, shoring and rope stock, confined space standby cover and mobilisation times for collapse, high-angle and below-grade incidents. After its first drill or real deployment, the unit should compare arrival times, extrication times and rescuer safety events with the plan's targets and revise its cache and training priorities.

Frequently Asked Questions FAQ:

What should participants know before an urban search and rescue and technical rescue course?

Participants should already lead or supervise rescue or emergency response crews and know basic rope, breathing apparatus and casualty handling. Bringing their unit's current equipment list, rescue procedures or a recent drill report helps them apply the simulations to their own team.

How does urban search and rescue and technical rescue differ from an incident command or industrial firefighting course?

It concentrates on rescue team work at the collapse, rope and confined space worksite: search, shoring, rigging, extrication and rescuer safety. Incident command courses cover multi-agency coordination centres, and firefighting courses cover fire attack and suppression, which this course touches only briefly.

Why does urban search and rescue rely on shoring before rescuers enter a collapsed building?

Shoring stabilises damaged floors, walls and openings so that aftershocks, debris removal or rescuer movement do not trigger a secondary collapse. Cribbing, raker and vertical shores are placed along the access route first, then voids are searched and casualties extricated.

What do participants take back from an urban search and rescue and technical rescue course?

Participants take back a Technical Rescue Team Capability and Deployment Plan with team typing, shift staffing, shoring and rope stock, confined space standby arrangements, an equipment cache list, a mobilisation timeline and simulation debrief findings to guide the unit's next drills.