CONCEPT

Crowd Management and Safety for Venues, Events and Mass Gatherings

11 – 15 January 2027
Dubai - Five-star CBD venue



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Ref: 67_8983 **Date:** 11 – 15 January 2027 **Location:** Dubai - Five-star CBD venue **Fees:** 21450 SAR

Introduction:

Crowd management and safety fail quietly until density rises past a tipping point at a gate, a stairway or a viewing area, and then minutes decide whether people are hurt. Many venues and organisers still set capacity by floor area alone and brief stewards without a crowd risk model. This Core Concept course equips those who own crowd safety to analyse crowd dynamics, assess crowd risk with DIM-ICE and RAMP, design ingress, circulation and egress, monitor density in real time and act on early warning signs. Participants leave with a Crowd Management Plan for their own venue or gathering.

Course Objectives:

- Analyse crowd density, flow rates and crowd behaviour at pinch points using Fruin Levels of Service
- Assess crowd risk across ingress, circulation and egress phases with the DIM-ICE risk model and RAMP analysis
- Calculate safe venue capacity and design entry, queueing and exit routes that match the expected crowd profile
- Organise stewarding, crowd communication, signage and control room monitoring so that emerging congestion is detected and acted on early
- Plan crowd-specific contingencies, including partial and full dispersal and joint working with emergency services
- Produce a Crowd Management Plan with capacity figures, stewarding deployment and trigger points ready for approval

Target Audience:

- Managers accountable for spectator and visitor safety at stadiums, arenas and exhibition grounds
- Event safety leads who prepare safety documentation for festivals, concerts and public celebrations
- Supervisors who plan and brief stewarding teams at entry gates, concourses and viewing areas
- Managers of religious sites and cultural venues that receive very large numbers of visitors at peak periods
- HSE managers who review crowd risk assessments submitted by organisers and contractors
- Operations managers of transport hubs and public spaces where crowds gather and queue

Course Outline:

Day 1: Crowd Science Foundations and Current Practice

- Crowd Types: Static, Moving, Queueing and Celebratory Crowds
- Crowd Density Measurement in Persons per Square Metre
- Crowd Crush and Crowd Collapse Mechanisms in Past Disasters
- Crowd Behaviour and Collective Decision Making Under Pressure
- Crowd Safety Maturity Baseline Checklist for Own Venue

Day 2: Crowd Risk Models and Analysis Methods

- DIM-ICE Risk Model: Design, Information and Management Matrix
- RAMP Analysis: Routes, Areas, Movement and Profile
- Fruin Levels of Service for Walkways, Stairs and Queues
- Flow Rate and Crowd Capacity Calculations for Gates and Corridors
- Crowd Risk and Congestion Mapping on Site Plans

Day 3: Venue Design, Stewarding and Crowd Communication

- Ingress Design: Search Lanes, Turnstile Throughput and Queue Layout
- Circulation and Egress Route Sizing with Connection Diagrams
- Stewarding Deployment Plan, Briefing Pack and Radio Protocol
- Crowd Communication: Public Address Scripts, Screens and Wayfinding Signage
- Crowd Counting Methods: Ticket Scans, Sensors and Headcount Sampling

Day 4: Crowd Monitoring, Warning Signs and Crowd Emergencies

- Control Room CCTV Monitoring and Density Observation Routine
- Early Warning Signs of Crowd Crush and Trigger Point Tables
- Crowd Dispersal and Phased Egress Decision Analysis
- Joint Crowd Plan with Police, Ambulance and Fire Services Liaison
- Large Religious, Sports and Cultural Gathering Scenarios: Peak Flow Patterns

Day 5: Crowd Simulation Exercises and the Crowd Management Plan

- Stadium Ingress Surge Simulation with Gate Congestion Injects
- Festival Stage Front Density Simulation and Show Stop Decision
- Crowd Incident Debrief and Lessons Learned Report
- Crowd Management Plan Drafting: Capacity, Stewarding and Triggers
- Crowd Management Plan Presentation and Peer Challenge

Skills You Will Gain:

- Crowd Dynamics Analysis
- Crowd Risk Assessment
- Venue Capacity Calculation
- Ingress and Egress Design
- Steward Deployment Planning
- Crowd Density Monitoring
- Crowd Incident Decision Making
- Multi-Agency Crowd Coordination

Why Attend This Course:

- Return with a Crowd Management Plan for a real venue or gathering, with capacity figures, steward deployment and trigger points
- Rehearse show-stop and gate-closure decisions in timed crowd simulations before facing them at a live event
- Challenge organiser and contractor crowd risk assessments with clear questions about density, flow and route capacity
- Compare crowd safety practice with peers from sports, entertainment, religious, cultural and transport settings

Conclusion:

Crowd safety depends on numbers that can be checked before the gates open: density, flow rate, route width and the time a crowd needs to move. This course builds from crowd science and past disasters, through DIM-ICE, RAMP and Fruin Levels of Service, to entry design, stewarding, crowd communication and monitoring, and then to warning signs, dispersal and joint working with emergency services. The final day tests these methods in crowd simulations and produces a Crowd Management Plan ready for approval at the participant's own venue.