CONCEPT

Landscape Management and Horticulture: Arid-Climate Planting, Irrigation and Green Space Maintenance

5 – 9 September 2027
Riyadh - KAFD district five-star



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Ref: 374_15754 **Date:** 5 – 9 September 2027 **Location:** Riyadh - KAFD district five-star **Fees:** 20000 SAR

Introduction:

Landscape management and horticulture in hot, dry climates fail when parks, residential communities and project sites are planted with thirsty species, irrigated on fixed timers and maintained under contracts that pay for visits rather than results. Water consumption climbs, trees and palms decline, turf scorches and pests spread before anyone acts. This Core Concept course gives landscape and green space teams the methods to select arid-climate plant palettes, manage soils and irrigation, care for turf, trees and palms, control pests and run maintenance contracts against KPIs. Participants produce a Landscape Management and Water Budget Plan.

Course Objectives:

- Assess a park, community or project landscape and record its softscape, hardscape and irrigation assets in a condition baseline
- Select native and drought-tolerant plant palettes grouped into hydrozones that match site climate, soil and intended use
- Specify soil tests, growing media and amendments that improve infiltration and reduce salinity stress
- Set drip irrigation schedules and smart controller settings, including the use of treated wastewater, and audit systems for leaks and clogging
- Plan turf, tree and palm care and integrated pest management routines with clear action thresholds
- Write landscape maintenance scopes, KPIs and water budgets that control cost and track plant health, heat and biodiversity outcomes

Target Audience:

- Managers responsible for the upkeep of municipal parks, streetscapes and public open spaces
- Managers accountable for landscaped common areas in residential communities, mixed-use and real estate developments
- Facilities managers responsible for campus, hospital, office and industrial grounds
- Supervisors overseeing landscape installation and establishment on large development projects
- Contract and service managers who specify, award and monitor landscape maintenance contractors

Course Outline:

Day 1: Landscape Planning Foundations and Site Assessment

- Landscape Asset Inventory: Softscape, Hardscape, Irrigation and Park Furniture
- Site Analysis Checklist: Climate, Microclimate, Sun Exposure and Wind
- Landscape Design Principles: Hydrozoning, Shade Placement and Functional Use Areas
- Xeriscaping Approach to Water-Conserving and Drought-Tolerant Layouts
- Landscape Condition Baseline Survey and Photo Record Method

Day 2: Plant Selection, Soils and Growing Media for Arid Climates

- Native and Drought-Tolerant Plant Palette Selection Matrix
- Plant Water Requirement Classes and Hydrozone Grouping Tables
- Soil Testing: Texture, Salinity, pH and Infiltration Rate
- Growing Media and Amendments: Organic Matter, Mulch and Sand-Based Root Zones
- Nursery Stock Specification and Planting Acceptance Inspection

Day 3: Irrigation Systems and Landscape Water Management

- Drip Irrigation Components: Filters, Pressure Regulators, Laterals and Emitters
- Smart Controllers: ET-Based Scheduling and Soil Moisture Sensor Control
- Irrigation Run-Time Calculation from Plant Water Need and Emitter Output
- Treated Wastewater Reuse for Irrigation: Quality Checks and Salinity Management
- Irrigation Audit: Flow Monitoring, Burst Detection and Emitter Clogging Checks

Day 4: Turf, Tree and Palm Care, Pest Control and Maintenance Contracts

- Turf Management Programme: Mowing Height, Aeration, Top-Dressing and Overseeding
- Tree and Palm Care: Structural Pruning, Frond Removal and Root Zone Protection
- Integrated Pest Management Cycle: Monitoring, Action Thresholds and Control Hierarchy
- Landscape Maintenance Contract Scope: Task Frequencies, Output Specifications and Deductions
- Landscape KPIs and Cost Control: Cost per Square Metre, Plant Survival and Water Use Index

Day 5: Inspection Walkthrough and the Landscape Management and Water Budget Plan

- Park Inspection Walkthrough with a Softscape, Irrigation and Public-Realm Scoring Sheet
- Case: Residential Community Retrofit from Turf to Drought-Tolerant Planting
- Case: Municipal Park Annual Maintenance Calendar and Crew Plan
- Water Budget, Urban Heat and Biodiversity Targets for a Green Space Portfolio
- Landscape Management and Water Budget Plan Presentation and Peer Review

Skills You Will Gain:

- Landscape Site Analysis
- Arid-Climate Plant Selection
- Hydrozone Planning
- Soil and Growing Media Specification
- Irrigation Scheduling
- Irrigation System Auditing
- Integrated Pest Management
- Landscape Contract Monitoring

Why Attend This Course:

- Return with a Landscape Management and Water Budget Plan built on a park, community or site you manage
- Cut irrigation water and replanting losses by matching plants, soils and controller settings to the site
- Hold landscape contractors to output specifications, inspection scores and KPIs rather than visit counts
- Compare green space practice with peers from municipalities, developers, campuses and project owners

Conclusion:

Green spaces in hot climates stay healthy and affordable only when planting, soil, water and maintenance are managed as one system. The course moves from site assessment and design principles, through arid-climate plant palettes, soils and growing media, to drip irrigation, smart controllers and treated wastewater reuse, and then to turf, tree and palm care, integrated pest management, contracts and KPIs. The final day applies these methods in an inspection walkthrough and cases, producing a Landscape Management and Water Budget Plan.