JUPITER PRIME
Consulting • Training • Advisory
جوبيتر برايم للاستشارات والتدريب

COURSE BROCHURE

Smart Airport Technology Roadmap Training Course

3 – 7 May 2027
Barcelona

jupiterprime.uk
info@jupiterprime.uk
Registered in the United Kingdom and Saudi Arabia

Smart Airport Technology Roadmap Training Course

Ref: 2053_75615 **Date:** 3 – 7 May 2027 **Location:** Barcelona **Fees:** 6200 GBP

Smart Airport Technology Roadmap training is a 1-week training course for airport IT, innovation and terminal operations leaders who must sequence biometrics, sensors, data platforms and self-service into one phased roadmap with a costed business case. Passenger growth, ageing terminal systems and rising expectations of touchless travel push airports to choose which technologies to fund first. Jupiter Prime Training delivers this course on the Smart Airport Technology Roadmap.

Why Smart Airport Technology Roadmap Matters Now

Three forces shape airport technology choices today: passengers who expect a touchless, predictable trip from kerb to gate; airlines and ground handlers who want shared, real-time operational information; and capital budgets stretched between new terminals and the renewal of legacy systems. Airports that sequence investments well gain throughput and resilience; those buying project by project end up with isolated systems and duplicated licences. The course rests on capability maturity models, total cost of ownership modelling and benefits realisation methods, applied to the terminal, airside and landside estate.

Who Gains Most from Smart Airport Technology Roadmap

- Leaders responsible for airport IT architecture and the integration of terminal systems
- Innovation and strategy leads who scout, trial and scale new passenger technologies
- Terminal and airside operations heads who own the processes that technology changes
- Commercial and finance leads who approve capital spending and track returns
- Project and portfolio leaders who coordinate airline, handler and tenant stakeholders

Airports and airport groups gain most when their IT, operations and finance leaders attend together and leave with one shared roadmap language.

Smart Airport Technology Roadmap Capabilities

The outcomes connect technology options to terminal processes, funding cycles and the people who must operate new systems every shift.

- Assess the digital maturity of terminal, airside and landside processes — investment prioritisation
- Map biometric, sensor and self-service options against passenger flows — technology selection
- Design a target data architecture linking operational systems — integration decisions
- Calculate total cost of ownership and benefits for each initiative — funding approval
- Build a phased roadmap with dependencies and decision gates — executive sponsors
- Plan staff, airline and tenant adoption for each release — operational readiness

Key Smart Airport Technology Roadmap Terms

- Smart airport — an airport that connects sensors, systems and people through shared data to run processes in real time.
- Biometric passenger processing — using facial or other biometric matching to confirm identity at bag drop, security and boarding.
- Internet of Things sensor network — connected devices that report queue lengths, equipment status, occupancy and environmental conditions.
- Airport operational data platform — a shared store and integration layer that gives partners one current view of operations.
- Total cost of ownership — the full cost of a technology over its life, including integration, support, upgrades and retirement.
- Decision gate — a planned review point where sponsors approve, change or stop the next phase of a roadmap.

Smart Airport Technology Roadmap Day by Day

Day 1: Forces Reshaping the Connected Terminal

- Passenger Expectation Trends — Which Journey Stages Need Touchless Options
- Stakeholder Ecosystem Mapping — Airline, Handler, Tenant and Border Interests
- Legacy System Inventory — Which Platforms Block New Initiatives
- Capability Maturity Model — Baseline for Terminal, Airside and Landside
- Smart Airport Vision Statement — Shared Direction for Executive Sponsors

Day 2: Technology Options Across the Airport Estate

- Biometric Passenger Processing Options — Single Token Versus Point Checks
- Sensor Networks and Queue Analytics — Staffing and Resource Allocation
- Self-Service Bag Drop and Kiosks — Counter Space and Staffing Mix
- Digital Twin Concepts — Scenario Testing Before Capital Commitment
- Cyber and Privacy Risk Screening — Vendor and Architecture Choices

Day 3: Data Architecture and Integration Choices

- Operational Data Platform Design — Single Source for Partner Information
- Integration Patterns and Interfaces — Build, Buy or Extend Decisions
- Data Ownership and Sharing Agreements — Airline and Tenant Access Rules
- Cloud and On-Premise Hosting Options — Resilience and Running Cost
- Technology Dependency Mapping — Sequencing of Platform Releases

Day 4: Business Cases, Funding and Adoption

- Total Cost of Ownership Modelling — Lifetime Cost per Initiative
- Benefits Realisation Mapping — Throughput, Revenue and Experience Measures
- Initiative Scoring Matrix — Ranking Value Against Effort and Risk
- Change Adoption Planning — Frontline Staff Training and Process Redesign
- Procurement Route Selection — Partnership, Licence or Service Contract

Day 5: Practising the Phased Smart Airport Roadmap

- Maturity Baseline Review — Confirming Starting Points for Each Area
- Initiative Shortlist Validation — Applying Scores to Biometrics and Sensors
- Release Sequencing Exercise — Dependencies, Decision Gates and Milestones
- Sponsor Briefing Rehearsal — Presenting Costs, Benefits and Trade-Offs
- Phased Smart Airport Roadmap — Final Plan With Costed Business Case

Applying Smart Airport Technology Roadmap After the Course

- Run a capability maturity review of one terminal process with operations and IT colleagues, then rank three candidate initiatives with the scoring matrix.
- Build a total cost of ownership and benefits model for the highest-ranked initiative and present it at the next capital planning decision gate.

Smart Airport Technology Roadmap Questions FAQ

What is a smart airport technology roadmap and why does it matter now?

A smart airport technology roadmap is a phased plan that sequences biometrics, sensors, data platforms and self-service by value and dependency. It matters now because passenger numbers, legacy system renewal and touchless travel expectations all compete for the same limited capital budget.

Which roles gain most from smart airport technology roadmap training?

Airport IT, innovation and operations leaders gain most. Finance leads and portfolio leaders who coordinate airlines and tenants also benefit.

How does smart airport technology roadmap training differ from a general aviation digital transformation course?

It focuses on airport infrastructure investment choices rather than airline or industry-wide digital strategy. You work on terminal, airside and landside systems, cost of ownership and release sequencing.

What do you bring back from smart airport technology roadmap training?

You bring back a phased roadmap draft with scored initiatives, dependencies and decision gates, plus a costed business case for the first release. You also keep a reusable scoring matrix.

Smart Airport Technology Roadmap: The Way Forward

The phased smart airport roadmap gives sponsors a sequenced, costed view of which technologies to fund first and why. Its first use informs the next capital approval, shared with IT, operations and finance leaders. After the first release, revisit benefits and adoption evidence and adjust later phases to what passengers and frontline staff experienced.