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COURSE BROCHURE

# Air Traffic Management Fundamentals Training Course

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Cairo

**jupiterprime.uk**

info@jupiterprime.uk

Registered in the United Kingdom and Saudi Arabia

# Air Traffic Management Fundamentals Training Course

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Air Traffic Management Fundamentals is a 1-week training course for airport operations managers, airline operations staff and aviation planners, built around an air traffic coordination playbook that sets how slots, flow restrictions and delays are handled with the air navigation service provider. Growing traffic and constrained airspace make every departure slot and arrival rate a shared decision. Jupiter Prime Training designed this Air Traffic Management Fundamentals course for those who depend on the control tower.

## Why Air Traffic Management Fundamentals Matter Now

Traffic recovery, new routes and airspace redesign put pressure on runway and sector capacity. Airlines want predictable block times and fewer holding patterns, airports want stand and gate plans that survive flow restrictions, and air navigation service providers need accurate flight plans and early information to balance demand. An organisation that reads air traffic flow measures correctly protects punctuality, fuel and crew hours; one that does not absorbs avoidable delays and missed slots. The course draws on ICAO Annex 11 Air Traffic Services and the ICAO Procedures for Air Navigation Services, Air Traffic Management PANS-ATM, Doc 4444.

## Who Gains Most from Air Traffic Management Fundamentals

- Airport staff who plan runway, stand and apron use around arrival and departure rates
- Airline operations staff who file flight plans and manage departure slots
- Planners who build schedules against airport and airspace capacity
- Staff who represent their organisation in collaborative decision making meetings
- Performance staff who track delay causes and punctuality

An airport and its main airline sending operations and planning staff together gain most, since both sides then read the same flow measures.

## Air Traffic Management Fundamentals Capabilities

Each outcome turns air traffic control from a black box into a set of rules, rates and messages an operator can plan around.

- Describe airspace classes, control units and the services each provides — operations briefings
- Specify flight plan content and the effect of errors on slots and routing — airline dispatch
- Assess runway and sector capacity against scheduled demand — schedule planners
- Apply air traffic flow management measures and slot rules to departure planning — operations control
- Coordinate milestone times through airport collaborative decision making — airport and airline partners
- Calculate delay, punctuality and taxi time measures by cause — performance reviews

## Key Air Traffic Management Fundamentals Terms

- Air traffic management ATM — the combined air traffic services, airspace management and flow management that keep aircraft moving safely and efficiently.
- Air traffic flow management ATFM — measures that balance traffic demand with available airport and airspace capacity, often through departure slots.
- Calculated take-off time — the time a flight subject to a flow measure is expected to take off.
- Flight plan — the information filed with air traffic services describing a flight's route, timing, aircraft and equipment.
- Airport collaborative decision making A-CDM — shared milestone data and procedures between airport, airlines, handlers and air traffic control.
- Target off-block time — the time an aircraft operator or handler expects the aircraft to be ready to leave the stand.

## Air Traffic Management Fundamentals Day by Day

### Day 1: Airspace and the Air Traffic Services System

- ICAO Annex 11 Air Traffic Services — Service Types and Responsibilities
- Airspace Classes and Structure — Controlled and Uncontrolled Airspace Choices
- Control Units — Tower, Approach and Area Control Roles
- Air Navigation Service Provider Model — Funding, Charges and Performance
- Communication, Navigation and Surveillance Basics — What Controllers Rely On

### Day 2: Flight Plans and Control Procedures

- Flight Plan Content and Filing — Route, Equipment and Timing Accuracy
- PANS-ATM Doc 4444 Procedures — Separation and Clearance Principles
- Standard Departure and Arrival Routes — Runway Throughput Effects
- Holding and Sequencing — Arrival Management and Fuel Impact
- Flight Plan Errors and Rejections — Slot and Routing Consequences

### Day 3: Capacity, Flow and Slots

- Runway and Sector Capacity — Declared Rates and Limiting Factors
- Air Traffic Flow Management Measures — Ground Delays and Rerouting
- Departure Slot Rules — Tolerance Windows and Slot Improvement
- Airport Slot Coordination — Schedule Clearance and Historic Rights
- Weather and Special Events — Capacity Reduction Planning

### Day 4: Collaborative Decisions and Performance

- Airport Collaborative Decision Making A-CDM — Milestones and Shared Times
- Target Off-Block and Start-Up Times — Accuracy and Penalties
- Network Operations Coordination — Airline Requests and Provider Responses
- Delay Coding and Attribution — Separating Air Traffic and Local Causes
- Safety Occurrence Reporting — Runway Incursions and Level Busts

## Day 5: Practising the Air Traffic Coordination Playbook

- Flight Plan Review Exercise — Applying Filing and Routing Checks
- Flow Restriction Scenario — Applying Slot and Rerouting Options
- A-CDM Milestone Simulation — Applying Off-Block Time Discipline
- Punctuality Dashboard — Taxi Time, Slot Adherence and Delay Causes
- Air Traffic Coordination Playbook — Contacts, Triggers and Responses

## Applying Air Traffic Management Fundamentals After the Course

- Analyse a month of departures for slot adherence and taxi time, separating air traffic flow causes from local causes.
- Agree with the airport and handler partners a list of A-CDM milestones each party updates and how late updates are flagged.

## Air Traffic Management Fundamentals Questions FAQ

### What are air traffic management fundamentals, and why do they matter now?

They are the services, procedures and flow measures that move aircraft safely through airspace and airports. They matter now because rising traffic and limited capacity turn slots, flight plans and off-block times into daily operational decisions for airports and airlines.

### Which roles gain most from air traffic management fundamentals training?

Airport operations staff, airline operations and dispatch staff, schedule planners and performance analysts gain most. They work with air navigation service providers every day without controller training and need to read flow measures and slot rules correctly.

### How does air traffic management fundamentals training differ from air traffic controller training?

Controller training builds licensed skills in separating aircraft. Air traffic management fundamentals training explains the system from the airport and airline side, covering airspace, flight plans, flow measures, slots, collaborative decision making and delay attribution.

### What do you bring back from air traffic management fundamentals training?

You bring back a coordination playbook with flight plan checks, slot and flow restriction responses, agreed milestone times, delay coding rules and contacts for working with the air navigation service provider.

## Air Traffic Management Fundamentals: The Way Forward

The air traffic coordination playbook first informs how the operation reacts when a flow restriction or reduced arrival rate is announced. Airline operations control, airport duty managers and schedule planners use it as one reference. After the first busy season, slot adherence and taxi times deserve a fresh look to confirm the agreed triggers and milestone times still fit the traffic.