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COURSE BROCHURE

Airline Network Planning and Scheduling Training Course

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Registered in the United Kingdom and Saudi Arabia

Airline Network Planning and Scheduling Training Course

Airline Network Planning and Scheduling is a 1-week training course for network planners, schedule planners, route development analysts and fleet planners, built around a seasonal network and schedule proposal that turns route evaluations into a flyable timetable with fleet, slots and rotations. Shifting demand, constrained airports and fleet delivery delays make every schedule season a set of hard trade-offs. Jupiter Prime Training designed this Airline Network Planning and Scheduling course for airline planning departments.

Why Airline Network Planning and Scheduling Matter Now

Airlines face new competitors on core routes, airports with no spare peak slots and aircraft arriving later than promised. Commercial teams want more frequencies, operations teams want robust rotations with buffer, and finance wants every aircraft hour earning. A planning department that sizes markets carefully and builds connection banks deliberately grows profitable flying; one that copies last season's timetable leaves revenue and slots unused. The course draws on the IATA Worldwide Airport Slot Guidelines WASG for slot allocation and historic rights at coordinated airports.

Who Gains Most from Airline Network Planning and Scheduling

- Planners who decide which routes to open, grow, reduce or close
- Schedule planners who build the seasonal timetable and aircraft rotations
- Analysts who size origin and destination demand and forecast market share
- Fleet planners who match aircraft types and seat counts to routes
- Slot and airport relations staff who secure and protect take-off and landing times

A planning department that sends network, schedule and fleet planners together gains most, because one timetable must satisfy all three views.

Airline Network Planning and Scheduling Capabilities

Each outcome moves planning from intuition about routes towards an evidence-based timetable that commercial and operational colleagues can accept.

- Assess new and existing routes on demand, competition and contribution — network committee
- Calculate origin and destination market size and expected share using quality of service — route development
- Design hub connection banks that maximise valid connections within minimum connecting times — hub planners
- Assign aircraft types to routes by trip cost, capacity and range — fleet planning
- Build aircraft rotations that respect slots, turnaround times and crew duty limits — schedule planners
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Weigh schedule robustness against utilisation before publishing the season — operations and commercial leadership

Key Airline Network Planning and Scheduling Terms

- Origin and destination O&D demand — passenger demand between a true starting point and final destination, regardless of the routing flown.
- Connection bank — a cluster of arrivals followed by a cluster of departures at a hub, timed to create transfer options.
- Minimum connecting time — the shortest time an airline or airport allows for a passenger or bag to change flights.
- Fleet assignment — choosing which aircraft type operates each flight in the schedule.
- Aircraft rotation — the sequence of flights a single aircraft operates during a day or schedule period.
- Quality of service index QSI — a model that estimates market share from frequency, timing, routing and product.

Airline Network Planning and Scheduling Day by Day

Day 1: Network Strategy and Market Context

- Airline Network Strategy — Hub-and-Spoke, Point-to-Point and Hybrid Choices
- Competitive Landscape Mapping — Capacity, Frequency and Pricing by Market
- Planning Calendar — Long-Term, Seasonal and Tactical Horizons
- Network Performance Review — Route Contribution and Market Share
- Planning Department Roles — Network, Schedule, Fleet and Slot Teams

Day 2: Route Evaluation and Demand

- O&D Demand Estimation — Local and Connecting Traffic Flows
- Market Sizing Methods — Booking Data, Surveys and Gravity Models
- QSI Market Share Modelling — Frequency, Timing and Routing Effects
- Route Profitability Forecast — Revenue, Cost and Contribution
- New Route Business Case — Launch, Defend or Decline Decisions

Day 3: Hub Design and Fleet Assignment

- Connection Bank Design — Wave Structure and Transfer Windows
- Minimum Connecting Times — Passenger and Baggage Constraints
- Fleet Assignment Logic — Matching Capacity to Demand by Flight
- Gauge and Frequency Trade-Offs — Larger Aircraft Versus More Departures
- Seasonality and Directional Demand — Peak and Off-Peak Adjustments

Day 4: Building the Schedule

- IATA Worldwide Airport Slot Guidelines WASG — Slot Requests and Historic Rights
- Aircraft Rotation Building — Utilisation, Night Stops and Maintenance Windows
- Crew Constraints in Scheduling — Duty Limits, Bases and Pairings
- Turnaround and Block Time Assumptions — Robustness Versus Utilisation
- Schedule Change Management — Retiming, Cancellations and Passenger Impact

Day 5: Practising the Seasonal Network and Schedule Proposal

- Route Case Exercise — Applying O&D Sizing and QSI Share
- Hub Bank Exercise — Applying Connection Windows and Fleet Choice
- Rotation Build Exercise — Applying Slot, Crew and Maintenance Limits
- Schedule Quality Measures — Utilisation, Connections and Punctuality Risk
- Seasonal Network and Schedule Proposal — Routes, Fleet, Slots and Rotations

Applying Airline Network Planning and Scheduling After the Course

- Re-evaluate the three weakest routes in the current season with O&D sizing and a QSI share estimate.
- Count valid connections in one hub bank against minimum connecting times and propose retimings that add connections.

Airline Network Planning and Scheduling Questions FAQ

What is airline network planning and scheduling, and why does it matter now?

It is the work of choosing which routes to fly, how often, with which aircraft and at what times. It matters now because new competition, slot-constrained airports and late aircraft deliveries make every timetable decision costly to get wrong.

Which roles gain most from airline network planning and scheduling training?

Network planners, schedule planners, route development analysts, fleet planners and slot staff gain most. They turn market evidence and operational limits into the timetable the whole airline sells and operates.

How does airline network planning and scheduling training differ from airline revenue management training?

Revenue management sets prices and seat availability on flights already scheduled. Airline network planning and scheduling decides those flights in the first place: routes, frequencies, fleet, connection banks, slots and aircraft rotations.

What do you bring back from airline network planning and scheduling training?

You bring back a seasonal network and schedule proposal with route evaluations, market size and share estimates, hub bank structure, fleet assignment and rotations that respect slots and crew limits.

Airline Network Planning and Scheduling: The Way Forward

The seasonal network and schedule proposal first informs which routes and frequencies enter the next season's slot requests. Network and schedule planners own it, and commercial, operations and crew planning review it before publication. After the first season flies, connection performance and block time assumptions deserve a fresh look to confirm the timetable still balances revenue and robustness.