

*bringing a world of experience  
to the airport industry*



# AIRPORT STRATEGIC MASTER PLANNING BOOT CAMP



## Course Outline

In-person or virtual – customized to suit

# Synopsis

## Airport Strategic Master Planning Boot Camp

Designed for both the novice airport planner and the experienced professionals, this course addresses the traditional subjects such as forecasting, planning the various components of the airport system, as well as the structure and purpose of an airport master plan and placing this into the context of greater regional planning.

In addition to the more conventional aspects, we delve into more contemporary elements such airport organizational structures, private vs public ownership and operation, revenue optimization, etc. We cover important subjects like modern forms of security and where this is headed, based on technology and the importance of commercialization of airports.

We also address new technologies in general, and their impacts.

# Presentors



**Peter Bianconi, P.Eng**  
*Airport Planning*

---

35+ years of airport planning, design and project management experience on six continents in private and public sectors with extensive experience on BOT/PPP projects, due diligence/analysis in purchases/ownership changes. Specializing in airport master planning, terminal and airfield design for new greenfield, brownfield and existing sites.

- B&A Airport Planners, Principal
- Modalis Infrastructure Partners, Senior Associate
- SNC Lavalin, Director, Airport Planning
- PDK Airport Planning Inc (PAPI), President
- Vancouver International Airport Authority, Manager Planning



**Adriana Boza**  
*Airport Operations & Management*

---

15+ years of airport operations and management experience, spanning diverse areas of expertise including operations management, security coordination, safety management systems, capacity planning, flight slot management, airport resource allocation, budget preparation and monitoring, performance, emergency response planning, and safety and quality indicators.

- B&A Airport Planners, Operations and Management Specialist
- Modalis Infrastructure Partners, Associate
- Juan Santa Maria International Airport, San Jose, Costa Rica, Manager of Airside Operations

# Objectives

1. Introduce the attendees to the principles of developing an effective master plan
2. Provide the attendees with a historical perspective of airport management and strategic planning
3. Instruct the attendees on how to develop each of the key elements of an airport master plan, including:
  - Aviation Forecasting
  - Site Selection
  - Airside Planning
  - Terminal Planning
  - Ground Access & Parking
  - Financial Planning & Capital Financing
  - Commercial Revenues
  - Environmental & Community Implications
4. Provide the attendees with extensive case studies and examples to illustrate the principles and planning techniques



# Course Program

## Module 1 - Introduction to Presenters, Program & Objectives

- Introduction to the presenters
- Course synopsis, objectives and program

## Module 2 - Airport Systems, Administration of Successful Airport Operations

- Airport Ownership & Operations vs Airport Privatization
- Understanding Airport Organizational Structure - Chart & Descriptions
- Assessing Airport Modernization
- Airport Management Models & Systems on an International Level
- Airport Legislation After Airline Deregulation
- Case Studies & Lessons Learned
- Key Take-aways

# Course Program

## Module 3 - Airport Master Planning

- Regulations of reference
- Master Planning Process
- Constitution of a Master Plan
- Case Studies

## Module 4 - Aviation Forecasting

- Nature of aviation forecasts
- Need for forecasting
- Products of forecasts
- Methodologies for forecasting
- Procedures for preparing forecasts
- Case studies
- Importance of dealing with uncertainty
- Peak hour forecasts

# Course Program

## Module 5 - Site Selection

- Process of finding and evaluating sites for a new airport
- Case studies provide numerous examples of data from previous studies
- Classroom assignment to evaluate sites for a new airport in a new Middle East city located in the desert along the Gulf Coast

## Module 6 - Airport Infrastructure Planning & Design

- Designing an appropriate airfield system at an airport
- Airport Reference Codes
- Technical components for the design of:
  - Runways
  - Taxiways
  - Aprons
- Capacity Analysis
- Small airports vs large airports
- New technologies, including new aircraft and eVTOL/vertiports

# Course Program

## Module 7 - Terminal Planning & Design

- Basic terminal concepts
- Multi-level terminals
- Elements of a passenger terminal, operations, capacity, new or upcoming technologies
- Level of service and sizing
- Lots of examples
- Appropriateness of the difference concepts

## Module 8 - Ground Access, Parking, Terminal Roadways & Parking

- Ground access and circulation systems
- Rapid transit access
- Case studies
- Terminal circulation roadways
- Terminal curb roadways
- Vehicle parking
- People movers



# Course Program

## Module 9 - Financial Planning & Capital Financing

- Uses and sources of funds
- Government financing and municipal bonds
- Private sector bonds, loans and syndication
- Financing process and key players
- Basic financial planning for airports
- Simple financial models
- Privatization and PPP models
- Case studies

## Module 10 - Maximizing Non-Aeronautical Revenue Streams

- Airport revenues
- Revenue maximization
- Non-aeronautical revenues
- Terminal Concessions and trends
- Branding and “street pricing”
- Concession planning: the process
- Comparable airports analysis
- Case studies

# Course Program

## **Module 11 - Environmental & Community Considerations**

- Community engagement
- Noise
- Climate change
- Sustainability
- Environmental impacts
- Compatible land uses in vicinity of airports
- Aerotropolis and airport cities

## **Module 12 - Airport Operations & Security Planning**

- Airport security
- Isolated aircraft parking position
- Airside roads
- Airside vulnerable areas
- Airport security management systems
- SeMS components

# Course Program

## Module 13 - Tour of Tocumen International Airport

- Tour of host airport conducted by members of the host airport senior management team
- Airport tour will feature:
  - Presentation by members of the host team covering features and history of the airport,
  - A tour of the terminal, landside and apron
  - Conditions permitting, an airside tour highlighting the various planning and capacity elements, including future plans



## Modalis Infrastructure Partners Inc.

5360 Airport Road South  
Vancouver Int'l Airport  
Richmond, British Columbia  
CANADA V7B 1B4

+1 778-939-8891

modalis.ca  
 info@modalis.ca  
 @modalis\_inc   
 Modalis Infrastructure Partners



company video

# Thank You

### REGIONAL/PROJECT OFFICES:

LONDON | SANTIAGO | MIAMI | PANAMA | SINGAPORE | VANCOUVER

