

2025

Curriculum
Master of Business Administration (MBA)
Aviation Operations and Management
(for Working Professionals)



SCHOOL OF MANAGEMENT

GATI SHAKTI VISHWAVIDYALAYA

Central University, Sponsored by Ministry of Railways
Lalbaug, Vadodara - 390 004, Gujarat, India

MBA (Aviation Operations and Management)

Aviation sector in India has witnessed significant increase in the passenger traffic. Passengers carried by domestic airlines during January-July 2024 were 923.35 lakh as against 881.94 lakh during the corresponding period of the previous year thereby registering an annual growth of 4.70 per cent and monthly growth of 7.33 per cent (Source: DGCA). Airport operations are becoming highly critical with a significant increase in the passenger traffic at airports.

As of 2023, the direct employment in the aviation and aeronautical manufacturing sector in India is around 250,000 employees. This number includes a wide range of roles, from pilots and cabin crew to ground staff, engineers, and airport personnel. It's important to note that this figure represents direct employment. The aviation industry also generates a significant number of indirect jobs in related sectors such as tourism, hospitality, and retail. Additionally, the Indian aviation sector is expected to employ an additional 100,000 people in the next few years due to rapid growth.

India's aviation sector is experiencing rapid growth, driven by increasing disposable incomes, a burgeoning middle class, and government initiatives to improve connectivity. This growth presents immense opportunities, but it also brings significant challenges. This is where aviation management becomes crucial.

Need for MBA in Aviation Management:

The goal of aviation management is to ensure the safe, efficient, and profitable operation of airlines and airports while delivering high levels of customer satisfaction. An intensifying growth coupled with challenges in aviation sector as outlined below sets the premise for offering MBA in Aviation Management.

1. **Infrastructure Development:** India needs skilled professionals to plan, design, and manage the expansion of airports, air traffic control systems, and other aviation infrastructure.
2. **Airline Operations:** Efficient airline operations require expertise in areas such as fleet management, revenue management, network planning, and customer service.
3. **Cargo and Logistics:** India's growing economy demands efficient air cargo handling and logistics. Skilled professionals are needed to optimize supply chains and reduce costs.
4. **Safety and Security:** The aviation industry is heavily regulated, and ensuring safety and security is paramount. Aviation management professionals play a crucial role in developing and implementing safety protocols.
5. **Economic Growth:** A thriving aviation sector contributes significantly to GDP growth, job creation, and tourism. Effective aviation management is essential to maximize these benefits.
6. **Global Connectivity:** India aims to become a global aviation hub. Aviation management professionals are needed to develop strategies to attract international airlines and passengers.
7. **Sustainability:** The aviation industry is under pressure to reduce its environmental impact. Aviation management professionals can develop sustainable practices and strategies.

Aviation management is a critical discipline for India's economic growth and development. By nurturing skilled aviation professionals, India can harness the full potential of its aviation sector and become a global leader in the industry. In view of this, MBA in Aviation Management program intends to equip the students for mid and senior managerial positions in diverse sectors like airlines, airports, air cargo, e-commerce, warehousing, research, and consulting globally, addressing a significant shortage of skilled professionals in the aviation industry. Emphasizing hands-on learning, the program integrates internships and on-the-job training to allow students to apply theoretical knowledge to real-world scenarios, enhancing their competitiveness in the job market. Focused on providing a comprehensive understanding of the aviation sector, the curriculum covers crucial topics such as airport and airline management, revenue management, economics, cargo management, and security. Additionally, students will benefit from industry exposure through case studies, site visits, and guest lectures by experts. The program will rigorously incorporate training in relevant software and technology, further enhancing students' employability and positioning them as valuable assets in the dynamic aviation landscape.

Program Objectives

Aviation management is the strategic planning, organization, and control of all activities involved in running an airline or airport. It encompasses a wide range of functions, from flight scheduling and crew management to baggage handling and ground transportation.

- To develop skilled professionals with a comprehensive understanding of the aviation industry and its business environment.
- To provide students with a strong foundation in business management principles and their application to the aviation sector.
- To cultivate leadership and decision-making abilities to address complex challenges in the aviation industry.
- To foster innovation and entrepreneurship within the aviation domain.

The curriculum will focus on key dimension such as:

- **Flight operations:** Scheduling, dispatching, and managing aircraft and crews.
- **Airport operations:** Managing terminal facilities, ground transportation, baggage handling, and security.
- **Cargo operations:** Handling and transporting air cargo efficiently.
- **Maintenance and engineering:** Ensuring aircraft and equipment are airworthy.
- **Customer service:** Providing excellent passenger experiences.
- **Financial management:** Managing airline finances, revenue, and costs.
- **Risk management:** Identifying and mitigating risks to operations.

MBA (Aviation Operations and Management) is a 2-year postgraduate degree course for working professionals that will equip students with the knowledge to manage operations, expenses, resource management of any aviation firm or airline. The program delves into the rapidly evolving aviation industry, which has experienced unprecedented growth in recent years. The industry's capacity to facilitate swift transportation across vast distances, coupled with the expansion of route networks, has ignited a surge in demand from both leisure and business travellers. Concurrently, globalization, shortened product lifecycles, and elevated consumer expectations have driven a parallel increase in air freight services. These combined factors have created a critical need for skilled professionals to manage the industry's complex operations and support the development of essential infrastructure, including the expansion and construction of airports.

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L-T-P (Lecture-Tutorial-Practice)

Lecture (L): 1 Credit = 15 Hrs.

Tutorial (T): 1 Credit = 15 Hrs.

Practice (P) [(Practical / Project Work): 1 Credit = 30 Hrs.]

Semester	Subjects	Lecture (L) Hrs./week	Tutorial (T) Hrs./week	Practice (P) Hrs./week	Credits	Hours	Page No.
I	Principles of Accounting	2	1	0	3	45	
	Business Statistics	2	1	0	3	45	
	Managerial Economics	2	1	0	3	45	
	Business Communication	2	0	0	2	30	
	Modelling through Spreadsheets and R	2	1	0	3	45	
	Marketing Management	2	1	0	3	45	
	Logistics and Supply Chain Essentials	2	1	0	3	45	
	Total Credits				20		
II	Operations and Project Management	3	1	0	4	60	
	Operations Research	2	1	0	3	45	
	Human Resource Management and Organizational Behaviour	2	0	0	2	30	
	Financial Management	3	0	0	3	45	
	Supply Chain Strategy	2	0	0	2	30	
	Research Methodology	2	1	0	3	45	
	Innovation & Entrepreneurship	2	0	0	2	30	
	Revenue Management	2	1	0	3	45	
	Total Credits				22		
	Total First-Year Credits				42		
	Summer Internship (6 Weeks)			8	4	120	
	Total First-Year Credits including Summer Internship (6 Weeks)				46		
III	Aviation Economics and Regulation	2	1	0	3	45	
	Airline Operations Management	2	1	0	3	45	
	Information Technology for Aviation	2	1	0	3	45	
	Aviation Safety and Security	2	0	0	2	30	
	AI&ML Principles and Applications for Aviation	2	0	0	2	30	
	Business Seminar (Independent Study) (Supply Chain of Different Commodities)	0	0	6	3	90	
	Elective 1	2	0	0	2	30	

	Elective 2	2	0	0	2	30	
	Elective 3	2	0	0	2	30	
	Total Credits				22		
IV	Airport Management	2	1	0	3	45	
	Air Cargo Logistics	2	1	0	3	45	
	Capstone Simulation	2	0	0	2	30	
	Business Ethics	2	0	0	2	30	
	Elective 4	2	0	0	2	30	
	Elective 5	2	0	0	2	30	
	Project Work	0	0	16	8	240	
	Total Credits				22		
	Total Second-Year Credits				44		
	Total Programme Credits				90		

List of Electives

Sl. No.	Name of the Elective	Credits	Hrs.
1	Aviation Law	2	30
2	Aviation Marketing and Sales	2	30
3	Aviation Finance	2	30
4	Air Traffic Management	2	30
5	Transport Infrastructure and Public Private Partnerships	2	30
6	Aviation Sustainability	2	30
7	Operational and Financial aspects of Air Freight	2	30